=> b reg

FILE 'REGISTRY' ENTERED AT 13:53:32 ON 27 AUG 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 AUG 2005 HIGHEST RN 861902-61-6 DICTIONARY FILE UPDATES: 26 AUG 2005 HIGHEST RN 861902-61-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d que sta l2 L1 ST

G3—C—G3 O—Ak C—G3 18 @19 20 @21 22 @23 24

VAR G1=OH/8/10 VAR G2=CH2/16/19 VAR G3=OH/AK/21 VAR G4=ME/23 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 24 STEREO ATTRIBUTES: NONE

L2 3458 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 690836 ITERATIONS

3458 ANSWERS

SEARCH TIME: 00.00.13

=> d ide l11 tot

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 106797-53-9 REGISTRY

ED Entered STN: 21 Feb 1987

CN 1-Propanone, 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methyl-

(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-[4-(2-Hydroxyethoxy)phenyl]-2-hydroxy-2-methyl-1-propanone

CN 2-Hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methyl-1-propanone

CN 2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone

CN 4-(2-Hydroxyethoxy)phenyl 2-hydroxy-2-propyl ketone

CN Darocur 2595

CN Darocur 2959

CN Irgacure 2959

CN ZLI 2959

FS 3D CONCORD

MF C12 H16 O4

CI COM

SR CA

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, PIRA, RTECS*, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

341 REFERENCES IN FILE CA (1907 TO DATE)

15 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

342 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d ide l14 tot

L14 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN

RN 601468-78-4 REGISTRY

ED Entered STN: 09 Oct 2003

CN Hyaluronic acid, ester with 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methyl-1-propanone, phenylmethyl ester, sodium salt (9CI) (CA INDEX NAME)

MF C12 H16 O4 . x C7 H8 O . x Na . x Unspecified

PCT Manual registration, Polyester, Polyester formed

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 106797-53-9 CMF C12 H16 O4

CM

CRN 9004-61-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 100-51-6 CMF C7 H8 O

HO-CH2-Ph

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L14 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN

RN601468-77-3 REGISTRY

Entered STN: 09 Oct 2003 ED

Hyaluronic acid, ester with 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2methyl-1-propanone, sodium salt (9CI) (CA INDEX NAME) OTHER NAMES:

Hyaluronic acid 2-hydroxy-4-(2-hydroxyethoxy)-2-methylpropiophenone ester sodium salt

MF

MF C12 H16 O4 . x Na . x Unspecified PCT Manual registration, Polyester, Polyester formed

SR

LC STN Files: CA, CAPLUS, USPATFULL

> CM 1

CRN 106797-53-9 CMF C12 H16 O4

```
CM
```

```
CRN 9004-61-9
CMF Unspecified
CCI PMS, MAN
```

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his full

T.5

(FILE 'HOME' ENTERED AT 13:39:17 ON 27 AUG 2005) D SAV

FILE 'REGISTRY' ENTERED AT 13:39:55 ON 27 AUG 2005

ACT KRI472F0/A _____

STR L1

 L_2 3458 SEA SSS FUL L1

FILE 'HCAPLUS' ENTERED AT 13:41:07 ON 27 AUG 2005 1 SEA ABB=ON PLU=ON US2005119219/PN OR (US2004-507472# OR L_3 WO2003-EP2538#)/AP, PRN

FILE 'REGISTRY' ENTERED AT 13:41:13 ON 27 AUG 2005

FILE 'HCAPLUS' ENTERED AT 13:41:13 ON 27 AUG 2005

TRA L3 1- RN : 3 TERMS L4

FILE 'REGISTRY' ENTERED AT 13:41:14 ON 27 AUG 2005

3 SEA ABB=ON PLU=ON L4 0 SEA ABB=ON PLU=ON L5 AND L2 L6

1841 SEA ABB=ON PLU=ON C12H16O4 AND 46.150.18/RID L7

49 SEA ABB=ON PLU=ON L7 AND 4 (1A)2(1A)HYDROXYETHOXY(1A)PHENYL L8 QUE ABB=ON PLU=ON (PMS OR MAN OR IDS)/CI OR UNSPECIFIED OR L9 COMPD OR COMPOUND OR (D OR T)/ELS

L10

7 SEA ABB=ON PLU=ON L8 NOT L9 1 SEA ABB=ON PLU=ON 106797-53-9/BI AND L10 L11

1403 SEA ABB=ON PLU=ON (CHLAMHYALURON? OR HYALURON?) (W) ACID? OR L12 DUROLANE OR GENZYME OR HYALOBARRIER OR HYALOFILL OR HYALURON### OR HYLAN OR HYLARTIL# OR LURONIT# OR MUCOITIN# OR SEPRACOAT OR SOFAST OR SYNVISC

O SEA ABB=ON PLU=ON L12 AND (L11 OR L2) 2 SEA ABB=ON PLU=ON L12 AND L8 L13 L14

FILE 'HCAPLUS' ENTERED AT 13:51:50 ON 27 AUG 2005

1 SEA ABB=ON PLU=ON L14 L15 L16

17420 SEA ABB=ON PLU=ON L12 18267 SEA ABB=ON PLU=ON (CH (CHLAMHYALURON? OR HYALURON?) (W) ACID? OR I.17 DUROLANE OR GENZYME OR HYALOBARRIER OR HYALOFILL OR HYALURON### OR HYLAN OR HYLARTIL# OR LURONIT# OR MUCOITIN# OR SEPRACOAT

OR SOFAST OR SYNVISC

E HYALUR/CT

E E7+ALL E E2+ALL

12288 SEA ABB=ON PLU=ON HYALURONIC ACID/CT 1.18

L19 4611 SEA ABB=ON PLU=ON (L11 OR L2)

FILE 'HCAPLUS' ENTERED AT 13:54:22 ON 27 AUG 2005

24 SEA ABB=ON PLU=ON (HYDROXYETHOXY OR HYDROXY (1A) ETHOXY) (1A) PH L20 ENYL (5A) HYDROXY (1A) (METHYLPROPANONE OR METHYL(1A) PROPANONE)

27 SEA ABB=ON PLU=ON (HYDROXYETHOXY OR HYDROXY (1A) ETHOXY) (1A) PH 1.21

```
ENYL (5A) HYDROXY (1A) (PROPYLKETONE OR PROPYL (1A) KETONE)
           5005 SEA ABB=ON PLU=ON DARCUR? OR IRGACURE? OR ZLI2959 OR
L22
                ZLI (1A) 2959
             14 SEA ABB=ON PLU=ON (L19 OR L20 OR L21 OR L22) AND (L16 OR L17
L23
                OR L18)
                E BELLINI D/AU
L24
             20 SEA ABB=ON PLU=ON ("BELLINI D"/AU OR "BELLINI DAVIDE"/AU)
                E ZANELLATO A/AU
             13 SEA ABB=ON PLU=ON ("ZANELLATO ANNA"/AU OR "ZANELLATO ANNA M
L25
                C"/AU OR "ZANELLATO ANNA MARIA"/AU OR "ZANELLATO ANNA MARIA
                C"/AU OR "ZANELLATO ANNA MARIA CECILIA"/AU)
                E ZANELLATO M/AU
                E FIDIA/CS, PA
            619 SEA ABB=ON PLU=ON FIDIA/CS, PA
1,26
              O SEA ABB=ON PLU=ON L23 AND (L24 OR L25 OR L26)
L27
                QUE ABB=ON PLU=ON PY<=2000 OR AY<=2000 OR PRY<=2000 OR
L28
                PD<20020312 OR AD<20020312 OR PRD<20020312
             8 SEA ABB=ON PLU=ON L23 AND L28
14 SEA ABB=ON PLU=ON (L23 OR L29)
L29
L30
                D SCA
            661 SEA ABB=ON PLU=ON (L16 OR L17 OR L18) (L) ESTER?
L31
              1 SEA ABB=ON PLU=ON L31 AND PROPIOPHENONE?
L32
              3 SEA ABB=ON PLU=ON L31 AND ?PHENONE?
2 SEA ABB=ON PLU=ON L33 NOT L32
L33
1.34
     FILE 'REGISTRY' ENTERED AT 14:06:23 ON 27 AUG 2005
L35
              1 SEA ABB=ON PLU=ON 131-57-7
     FILE 'HCAOLD' ENTERED AT 14:07:51 ON 27 AUG 2005
L36
              O SEA ABB=ON PLU=ON L14
            412 SEA ABB=ON PLU=ON L2
L37
L38
              O SEA ABB=ON PLU=ON L11
              O SEA ABB=ON PLU=ON L12
L39
            557 SEA ABB=ON PLU=ON (CHLAMHYALURON? OR HYALURON?) (W) ACID? OR
L40
                DUROLANE OR GENZYME OR HYALOBARRIER OR HYALOFILL OR HYALURON###
                 OR HYLAN OR HYLARTIL# OR LURONIT# OR MUCOITIN# OR SEPRACOAT
                OR SOFAST OR SYNVISC
              0 SEA ABB=ON PLU=ON L37 AND L40
L41
     FILE 'HCAPLUS' ENTERED AT 14:09:22 ON 27 AUG 2005
              1 SEA ABB=ON PLU=ON (L15 OR L32)
L42
```

=> b hcap

FILE 'HCAPLUS' ENTERED AT 14:09:48 ON 27 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Aug 2005 VOL 143 ISS 10 FILE LAST UPDATED: 26 Aug 2005 (20050826/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

substance identification.

```
=> d all fhitstr 142 tot
L42 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
     2003:737790 HCAPLUS
AN
DN
     139:262427
     Entered STN: 19 Sep 2003
ED
     Ester derivatives of hyaluronic acid,
ΤI
     preparation, hydrogel materials by photocuring, and biomedical use
ΤN
     Bellini, Davide; Zanellato, Anna Maria
PA
     Fidia Advanced Biopolymers S.R.L., Italy
so
     PCT Int. Appl., 27 pp.
     CODEN: PIXXD2
DΤ
     Patent
LΑ
     English
     ICM C08B037-08
IC
     ICS C08J003-28; C08J003-075
44-5 (Industrial Carbohydrates)
CC
     Section cross-reference(s): 63
FAN.CNT 1
                                                                          DATE
                                                APPLICATION NO.
     PATENT NO.
                           KIND
                                   DATE
                                   -----
                           ----
PΤ
     WO 2003076475
                            A1
                                   20030918
                                                WO 2003-EP2538
                                                                          20030312
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
              FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2478655
                            AA
                                   20030918
                                                CA 2003-2478655
                                                                          20030312
                                                EP 2003-743875
     EP 1519962
                            A1
                                   20050406
                                                                          20030312
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2005119219
                                                                          20030312
                            A1
                                                US 2003-507472
                                   20050602
PRAI IT 2002-PD64
                            Α
                                   20020312
     WO 2003-EP2538
                            W
                                   20030312
CLASS
 PATENT NO.
                  CLASS PATENT FAMILY CLASSIFICATION CODES
                  ____
 WO 2003076475
                  ICM
                          C08B037-08
                  ICS
                          C08J003-28; C08J003-075
 WO 2003076475
                  ECLA
                          A61L027/20+C08L5/08; A61L029/04D+C08L5/08;
                          A61L031/04D+C08L5/08; C08B037/00P2F
US 2005119219
                 NCL
                          514/054.000
os
     MARPAT 139:262427
AB
     The hyaluronic acid ester derivs., have
     carboxylic groups are partially esterified with hydroxy groups of propiophenone derivs. Thus, 6.21 g tetrabutylammonium salt of hyaluronic acid, mol. weight 180,000 Da (10 meq.) are
     solubilized in 248 mL DMSO at room temperature, 2 g 2-hydroxy-4-(2-
     hydroxyethoxy)-2-methylpropiophenone (HHMP) bromide (7 meq.) are added,
     the solution is maintained at 37° for 48 h, 2.5% NaCl solution is added
     and the mixture is poured under stirring into 750 mL acetone, precipitating,
     filtering and washing three times with 100 mL acetone: water 5:1, three
     times with 100 mL acetone, and lastly vacuum-drying 24 h at 30°
     gave 5.3 g HHMP ester product.
     hyaluronic acid ester prepn photocuring
ST
     hydrogel biol use
IT
     Drug delivery systems
         (controlled-release; hyaluronic acid esters
        photocured for hydrogels for)
```

```
IT
     Cell proliferation
        (fibroblast, scaffolds; hyaluronic acid
        esters photocured for hydrogels for)
IT
     Medical goods
        (hyaluronic acid esters photocured for
        hydrogels for)
IT
     Drug delivery systems
         (hydrogels; hyaluronic acid esters
        photocured for hydrogels for)
ΙT
     Fibroblast
        (proliferation, scaffolds; hyaluronic acid
        esters photocured for hydrogels for)
     124-22-1DP, Dodecylamine, amide with hyaluronic acid
IT
     esters 601468-77-3DP, amide with dodecylamine
     601468-77-3P, Hyaluronic acid
     2-hydroxy-4-(2-hydroxyethoxy)-2-methylpropiophenone ester sodium
     salt 601468-78-4P
     RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (hyaluronic acid esters photocured for
        hydrogels)
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Aeschlimann; WO 0016818 A 2000 HCAPLUS
(2) Fidia Advanced Biopolymers Srl; WO 9637519 A 1996 HCAPLUS
(3) Hercules Incorporated; EP 0749982 A 1996 HCAPLUS
(4) Nguyen, K; BIOMATERIALS 2002, V23(22), P4307 HCAPLUS
(5) Seikagaku Corporation; WO 9718244 A 1997 HCAPLUS
(6) Waki; US 6031017 A 2000 HCAPLUS
_{
m IT}
     601468-77-3DP, amide with dodecylamine
     RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
         (hyaluronic acid esters photocured for
        hydrogels)
RN
     601468-77-3 HCAPLUS
     Hyaluronic acid, ester with 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-
CN
     methyl-1-propanone, sodium salt (9CI) (CA INDEX NAME)
     CM
          1
     CRN 106797-53-9
     CMF C12 H16 O4
                           Me
        -CH2
```

CM 2 ·

CRN 9004-61-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

=> d all hitstr 130 tot

```
L30 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
ΑN
     2005:471920 HCAPLUS
DN
     143:13333
ED
     Entered STN: 03 Jun 2005
     Excipients in drug delivery vehicles for depot gels
TI
IN
     Chen, Guohua; Priebe, David T.
     Alza Corporation, USA
PA
SO
     PCT Int. Appl., 44 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
     ICM A61K009-14
IC
     ICS A61F013-00
CC
     63-6 (Pharmaceuticals)
FAN.CNT 1
                          KIND DATE
                                              APPLICATION NO.
                                                                      DATE
     PATENT NO.
                          ----
                                  -----
                                              _____
                                                                       -----
                                 20050602 WO 2004-US37606
                                                                      20041112
PΙ
     WO 2005048989
                         A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2003-519972P
                          P
                                  20031114
                                  20041110
     US 2004-985116
                           Α
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                         ______
 WO 2005048989
                 ICM
                         A61K009-14
                 ICS
                        A61F013-00
 WO 2005048989 ECLA A61K009/00M4; A61K047/34
     Injectable depot gel compns. and kits that provide an excipient for
AB
     modulating a release rate and stabilizing beneficial agents are provided.
     The gel compns. comprise biodegradable, bioerodible polymers and
     water-immiscible solvents in amts. effective to plasticize the polymers
     and form gels with the polymers. Suitable excipients include pH
     modifiers, reducing agents, and antioxidants. A gel composition was prepared
     containing glycolide-lactide copolymer.
ST
     drug delivery vehicle depot gel
IT
     Antioxidants
        (excipients in drug delivery vehicles for depot gels)
     Polyoxyalkylenes, biological studies
     Polysaccharides, biological studies
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (excipients in drug delivery vehicles for depot gels)
IT
     Polyanhydrides
     Polycarbonates, biological studies
     Polyesters, biological studies
     Polyoxymethylenes, biological studies
     Polyphosphazenes
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (excipients in drug delivery vehicles for depot gels)
IT
     Drug delivery systems
        (gels, sustained-release; excipients in drug delivery vehicles for
        depot gels)
IT
     Polyethers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (ortho ester group-containing; excipients in drug delivery vehicles for
```

```
depot gels)
IT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (phosphorus-containing; excipients in drug delivery vehicles for depot
IT
     Ketals
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polymers; excipients in drug delivery vehicles for depot gels)
     50-81-7, Ascorbic acid, biological studies 52-90-4, L-Cysteine,
IT
     biological studies 56-81-5, Glycerol, biological studies 57-55-6,
     Propylene glycol, biological studies 58-95-7, \alpha-Tocopherol acetate
     59-02-9, \alpha-Tocopherol 60-01-5, Tributyrin 62-54-4, Calcium acetate 63-68-3, L-Methionine, biological studies 67-68-5, Dmso,
     biological studies 68-12-2, Dmf, biological studies 75-21-8, Oxirane, biological studies 75-56-9, Methyloxirane, biological studies 77-89-4,
     Acetyl triethyl citrate 77-93-0, Triethyl citrate 77-94-1, Tributyl
     citrate 78-40-0, Triethyl phosphate 78-93-3, Mek, biological studies
     79-20-9, Methyl acetate 84-66-2, Diethyl phthalate 87-91-2, Diethyl
     tartrate 94-13-3, Propylparaben 96-48-0, Butyrolactone 96-49-1,
                          97-64-3, Ethyl lactate 100-51-6, Benzyl alcohol,
     Ethylene carbonate
     biological studies 102-76-1, Triacetin 105-60-2, Caprolactam,
                           107-21-1, Ethylene glycol, biological studies
     biological studies
     108-32-7, Propylene carbonate 109-99-9, Thf, biological studies 111-87-5, 1-Octanol, biological studies 112-80-1, Oleic acid, biological
              120-51-4, Benzyl benzoate 121-79-9, Propyl gallate 128-37-0,
     Bht, biological studies 128-39-2, 2,6-Di-tert-butylphenol 137-66-6,
     Ascorbyl palmitate 141-43-5, Ethanolamine, biological studies
     141-78-6, Ethyl acetate, biological studies 142-17-6, Calcium oleate
     142-72-3, Magnesium acetate 471-34-1, Calcium carbonate, biological
               546-93-0, Magnesium carbonate 547-66-0, Magnesium oxalate
     557-07-3, Zinc oleate 557-34-6, Zinc acetate 563-72-4 616-45-5,
                    814-80-2, Calcium lactate 831-61-8, Ethyl gallate
     2-Pyrrolidone
     872-50-4, N-Methyl-2-pyrrolidone, biological studies 1034-01-1, Octyl
     gallate 1166-52-5, Lauryl gallate 1300-71-6, Dimethylphenol
     1305-62-0, Calcium hydroxide, biological studies 1309-42-8, Magnesium
     hydroxide 1398-61-4, Chitin 1406-18-4, Vitamin E 1421-63-2,
     Trihydroxybutyrophenone 1555-53-9, Magnesium oleate 2474-72-8D,
     Hydroxyquinone, butylated 3079-28-5, Decyl methyl sulfoxide 3486-35-9,
     Zinc carbonate 4740-78-7, 1,3-Dioxan-5-ol
                                                   5464-28-8,
     1,3-Dioxolane-4-methanol 7344-42-5, Zinc maleate 7757-86-0, Magnesium
     hydrogen phosphate 7757-93-9, Monocalcium phosphate 7758-23-8,
     Monocalcium phosphate 7779-90-0, Zinc phosphate 9003-29-6, Polybutene
     9003-39-8, Pvp 9004-61-9, Hyaluronic acid
     9012-76-4, Chitosan 10043-83-1, Magnesium phosphate 10103-46-5,
     Calcium phosphate 14332-60-6, Zinc hydrogen phosphate 16039-53-5, Zinc
              18917-93-6, Magnesium lactate 22329-43-7, Magnesium maleate
     23693-48-3, Zinc oxalate 24968-12-5, Polybutylene terephthalate
     24980-41-4, Polycaprolactone 25013-16-5, Bha 25248-42-4,
     Polycaprolactone 25322-68-3, Peg 25395-31-7, Diacetin 25795-42-0, Cepham 26009-03-0, Polyglycolide 26023-30-3, Poly[oxy(1-methyl-2-oxo-
     1,2-ethanediyl)] 26062-94-2, Polybutylene terephthalate 26161-42-2
     26202-08-4, Polyglycolide 26680-10-4, Polylactide 26780-50-7,
     Lactide-glycolide copolymer 29223-92-5 30846-39-0, Glycolide-L-lactide
     copolymer 31621-87-1, Polydioxanone 33135-50-1, Poly(L-lactide)
     34938-90-4, Calcium maleate 43070-85-5, Hydroxycoumarin
                                                                  59227-89-3,
            70524-20-8, Caprolactone-lactide copolymer 78644-42-5,
     Azone
     Poly(malic acid)
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (excipients in drug delivery vehicles for depot gels)
     7440-66-6D, Zinc, complexes with somatotropin 9002-72-6D, Somatotropin,
IT
     zinc complexes 38396-39-3, Bupivacaine
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (excipients in drug delivery vehicles for depot gels)
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 2
RE
```

```
(1) Brodbeck; US 6130200 A 2000 HCAPLUS
(2) Soff; US 5801012 A 1998 HCAPLUS
     1421-63-2, Trihydroxybutyrophenone 9004-61-9,
     Hyaluronic acid
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (excipients in drug delivery vehicles for depot gels)
     1421-63-2 HCAPLUS
RN
     1-Butanone, 1-(2,4,5-trihydroxyphenyl)- (9CI) (CA INDEX NAME)
CN
HO
              Pr-n
HO
            OH
RN
     9004-61-9 HCAPLUS
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
L30
     2005:324038 HCAPLUS
AN
DN
     142:397825
ED
     Entered STN: 15 Apr 2005
     Biocompatible, biostable coating of medical surfaces composed of
     polysulfone and hydrophilic polymers
     Horres, Roland; Hoffmann, Michael; Faust, Volker; Hoffmann, Erika; Di
IN
     Biase, Donato
PA
     Hemoteq G.m.b.H., Germany
SO
     PCT Int. Appl., 57 pp.
     CODEN: PIXXD2
DT
     Patent
LА
     German
IC
     ICM A61L027-00
CC
     63-7 (Pharmaceuticals)
     Section cross-reference(s): 38
FAN.CNT 1
     PATENT NO.
                           KIND
                                   DATE
                                                APPLICATION NO.
      -----
                           ----
                                   -----
                                                ------
                                                                         -----
     WO 2005032611
                           A2
                                   20050414
                                                WO 2004-DE2184
                                                                         20040929
PI
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
              EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
              SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
     DE 102004020856
                                   20050414
                                                DE 2004-102004020856
                                                                         20040428
                            A1
                                                US 2004-979977
     US 2005129731
                            A1
                                   20050616
                                                                         20041103
PRAI DE 2003-10345132
                            Α
                                   20030929
     US 2003-516295P
                            Р
                                   20031103
     DE 2004-102004020856 A
                                   20040428
                                   20040517
     US 2004-571582P
                            Р
CLASS
                  CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                          A61L027-00
 WO 2005032611
                  ICM
                         A61L031/10+C08L81/06; A61L033/06D+C08L81/06
 DE 102004020856 ECLA
```

```
NCL
                       424/423.000
US 2005129731
    The invention relates to medical products comprising at least one
     biocompatible biostable polysulfone coating. Said polysulfone coating
     makes it possible, via the admixt. of an adequate quantity of at least one
     hydrophilic polymer, to control the elution kinetics of the at least one
     antiproliferative, anti-inflammatory, antiphlogistic, and/or
     antithrombogenic agent that is introduced and/or applied while allowing
     different agents or agent concns. to be spatially separated with the aid of
     the layer system of biostable polymers. Also disclosed are a method for
     producing said medical products and the use thereof particularly in the
     form of stents for preventing restenosis. Thus a 2 g base-coat solution for
     spray coating contained 17.6 mg polyethersulfone (Udel form Solvay) in
     chloroform. The 3 g chloroformic topcoat solution included 25.2 g
     polyethersulfone and 1,2 mg PVP.
    medical implant stent coating polyethersulfone hydrophilicity polymer
     biocompatibility
IT
     Ricins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (A; biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
     Antisense oligonucleotides
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Bcl-xL; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
IT
     Cadherins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (E-; biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
IT
     Integrins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (GpIIb/IIIa -Platelet membrane receptor; biocompatible, biostable
        coating of medical surfaces composed of polysulfone and hydrophilic
        polymers)
     Collagens, biological studies
TΤ
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (N-hydroxysuccinimide derivs.; biocompatible, biostable coating of
        medical surfaces composed of polysulfone and hydrophilic polymers)
IΤ
     Transcription factors
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (NF-κB (nuclear factor of κ light chain gene enhancer in
        B-cells); biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
     Calcium-binding proteins
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (S-100; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
TT
     Platelet-derived growth factors
     Vitronectin receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antagonists; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
IT
     Medical goods
        (antithrombogenic; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
TΤ
     Gene, animal
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (b-myc-Antisense; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
IT
     5-HT antagonists
     Anti-inflammatory agents
     Antibiotics
     Anticoagulants
     Antihistamines
     Antipyretics
```

Antitumor agents

```
Antiviral agents
     Biocompatibility
     Coating materials
     Fungicides
     Human
     Hydrophilicity
     Porosity
     Porous materials
     Vasodilators
        (biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
ΙT
     Albumins, biological studies
     Caseins, biological studies
     Collagens, biological studies
     Fibrinogens
     Fibrins
     Gelatins, biological studies
     Lipids, biological studies
     Polyanhydrides
     Polyanhydrides
     Polycarbonates, biological studies
     Polyesters, biological studies
     Polyoxyalkylenes, biological studies
     Polyphosphazenes
     Polysulfones, biological studies
     Polyurethanes, biological studies
     Rubber, biological studies
     Zeins
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
     Antisense oligonucleotides
     Prostaglandins
     Protamines
     Selectins
     Steroids, biological studies
     Sulfonamides
     Terpenes, biological studies
     Tocopherols
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
IT
     Polysulfones, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (block copolymers; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
     Polymers, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (block; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
IT
     Gene, animal
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (c-myc- Antisense; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
     Triterpenes
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (carboxy, boswellic acids; biocompatible, biostable coating of medical
        surfaces composed of polysulfone and hydrophilic polymers)
     Polysulfones, biological studies
     RL: DEV (Device component use); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (chlorosulfonated/S-alkoxy dechlorinated; biocompatible, biostable
```

IT

TT

IT

```
coating of medical surfaces composed of polysulfone and hydrophilic
        polymers)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (cholesterol ester-exchanging, inhibitors of; biocompatible, biostable
        coating of medical surfaces composed of polysulfone and hydrophilic
        polymers)
     Polymers, biological studies
IT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (co-; biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
IT
     Macrolides
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (epothilones, A and B; biocompatible, biostable coating of medical
        surfaces composed of polysulfone and hydrophilic polymers)
     Polyesters, biological studies
TΤ
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (glycolide-based; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
     Polycarbonates, biological studies
TT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (imino-; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
     Drug delivery systems
IT
     Prosthetic materials and Prosthetics
        (implants; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
TΤ
     Apoptosis
        (inhibitors; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
IT
     Cvtokines
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (inhibitors; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
     Polyesters, biological studies
IT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (lactic acid-based; biocompatible, biostable coating of medical
        surfaces composed of polysulfone and hydrophilic polymers)
     Antibodies and Immunoglobulins
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (monoclonal; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
     Anti-inflammatory agents (nonsteroidal; biocompatible, biostable coating of medical surfaces
ΙT
        composed of polysulfone and hydrophilic polymers)
     Polyethers, biological studies
IT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (ortho ester group-containing; biocompatible, biostable coating of medical
        surfaces composed of polysulfone and hydrophilic polymers)
IT
     Polyolefins
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (oxalate; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
TΤ
     Proteins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (p65; biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
     Polysulfones, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
```

```
(perfluorinated; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
     Polyesters, biological studies
TT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (phosphoesters; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
TΤ
     Polyamides, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (poly(amino acids); biocompatible, biostable coating of medical
        surfaces composed of polysulfone and hydrophilic polymers)
ΙT
     Polyesters, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (polyamide-; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
ΙT
     Polyamides, biological studies
    RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (polyester-; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
TT
     Phenols, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyphenols, nonpolymeric, from tea; biocompatible, biostable coating
        of medical surfaces composed of polysulfone and hydrophilic polymers)
IT
    Artery, disease
        (restenosis; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
IT
        (smooth, cell, inhibitors of; biocompatible, biostable coating of
        medical surfaces composed of polysulfone and hydrophilic polymers)
ΙT
    Coating process
        (spray; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
TT
    Medical goods
        (stents; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
    Carboxylic acids, biological studies
TΤ
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (triterpene, boswellic acids; biocompatible, biostable coating of
        medical surfaces composed of polysulfone and hydrophilic polymers)
IT
    Interferons
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\alpha; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
ΙT
     Interferons
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (β; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
    Interferons
IΤ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (γ; biocompatible, biostable coating of medical surfaces composed
        of polysulfone and hydrophilic polymers)
ΙT
     71695-69-7, Baccharinoid B 1
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Baccharinoid B 1; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
    71748-64-6, Baccharinoid B 2
IT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Baccharinoid B 2; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
TТ
     72074-16-9, Baccharinoid B 3
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Baccharinoid B 3; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
```

```
IT
     71718-23-5, Baccharinoid B 7
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Baccharinoid B 7; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
IT
     155486-20-7, Cryptophycin E
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Cryptophycin E; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
IT
    106096-93-9, BFGF
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antagonist; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
     141-43-5, Seramine, biological studies
IT
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (biocompatible, biostable coating of medical surfaces composed of
       polysulfone and hydrophilic polymers)
    99331-25-6, Triazolopyrimidine
IT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (biocompatible, biostable coating of medical surfaces composed of
       polysulfone and hydrophilic polymers)
     56-81-5, Glycerin, biological studies 80-05-7D, iminocarbonate polymers
IT
               6066-82-6D, derivs. of collagen 7585-39-9,
     3233-46-3
    β-Cyclodextrin
                    9000-01-5, Gum arabic 9000-07-1, Carrageenan
     9000-69-5, Pectinic acid 9002-89-5, Polyvinylalcohol 9003-05-8,
    Polyacrylamide 9003-11-6 9003-39-8, Polyvinylpyrrolidone
    Dextran, biological studies 9004-61-9, Hyaluronic
           9005-25-8, Starch, biological studies 9005-49-6, Heparin,
                                                          9012-76-4, Chitosan
                        9007-28-7, Chondroitin sulfate
    biological studies
    9012-76-4D, Chitosan, N-carboxymethylated/acetylated
                                                           24937-72-2,
    Polymaleic acid anhydride 24980-41-4, Poly-ε-caprolactone
    25135-51-7 25248-42-4, Poly[oxy(1-oxo-1,6-hexanediyl)]
     25322-68-3, Polyethyleneglycol
                                    25322-69-4, Polypropyleneglycol
    25667-42-9, Polyethersulfone 25667-42-9D, Polyethersulfone, substituted
    derivative
                26009-03-0, Polyglycolic acid 26023-30-3, Poly[oxy(1-methyl-2-
    oxo-1,2-ethanediyl)] 26099-09-2 26100-51-6, Polylactic acid
    26124-68-5, Polyglycolic acid 26354-94-9, Polyvalerolactone
                              31852-84-3
                                           37353-50-7
                                                        50862-75-4,
    27613-96-3
                 29223-92-5
     Poly(oxycarbonyloxy-1,3-propanediyl)
                                           51309-43-4
                                                        52224-87-0
     52352-27-9, Polyhydroxybutyric acid
                                          53260-52-9, N-Desulfo heparin
     53260-52-9D, N-Desulfo heparin, reacetylated 61128-18-5 67183-98-6,
                         67183-98-6D, Polyphenylsulfone, substituted derivative
    Polyphenylsulfone
    90409-77-1 102190-94-3, Polyhydroxyvaleric acid 113883-69-5
                  143715-04-2
    128171-16-4
                               159350-71-7, Poly-ε-Decalactone
    214259-59-3
    RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (biocompatible, biostable coating of medical surfaces composed of
       polysulfone and hydrophilic polymers)
    50-02-2, Dexamethasone 50-07-7, Mutamycin
                                                  50-18-0, Cyclophosphamide
    50-23-7, Hydrocortisone 50-27-1, Estriol 50-28-2, \beta-Estradio biological studies 50-33-9, Phenylbutazon, biological studies
                                                  50-28-2, \beta-Estradiol,
    biological studies
    Estradiolbenzoate 50-63-5, Chloroquine phosphate 50-76-0, Dactinomycin 50-78-2, Aspirin 51-06-9, Procainamide 51-21-8, Fluorouracil
    52-24-4, Thiotepa 52-53-9, Verapamil
                                              52-67-5, Penicillamine
     Estron, biological studies 53-86-1, Indomethacin 54-05-7, Chloroquine
     55-98-1, Busulfan 56-54-2, Quinidine 57-22-7, Vincristin
                                               58-32-2, Dipyridamole
     Ethinylestradiol
                       57-91-0, \alpha-Estradiol
     59-05-2, Methotrexate 60-54-8, Tetracycline 61-33-6, biological
    studies 61-68-7, Mefenamic acid 64-86-8, Colchicine
                                                              66-79-5,
    Oxacillin 77-52-1, Ursolic acid
                                        78-11-5, Pentaerythrityltetranitrate
     80-08-0, Dapson 81-81-2, Warfarin 83-46-5, \beta-Sitosterin
     84-79-7, Lapachol 92-61-5, Scopoletin 93-35-6, Umbelliferon
    Benzocaine 108-28-1, Protoanemonin 118-42-3, Hydroxychloroquine
     124-94-7, Triamcinolone 125-84-8, Aminoglutethimide 126-07-8,
    Griseofulvin 127-07-1, Hydroxycarbamide 129-06-6, Coumadin 130-95-0,
```

with an entropy of the A

147-94-4, Cytarabine 148-82-3, Melphalan 137-58-6, Lidocaine 154-42-7, Thioguanine 154-93-8, Carmustine 299-75-2, Treosulfan 302-79-4, Tretinoin 303-34-4, Lasiocarpine 305-03-3, Chlorambucil 313-06-4, Estradiolcypionate 378-44-9, Betamethasone 443-48-1, Metronidazol 446-86-6, Azathioprin 458-37-7, Curcumin 472-15-1, Betulinic acid 473-98-3, Betulin 475-75-2, Liriodenine 480-82-0, Indicine 481-49-2, Cepharantin 500-68-5, Bilobol 501-26-8, Ginkgol 504-64-3D, Carbon suboxide, macrocyclic oligomers 508-44-1, Anemonine 518-28-5, Podophyllotoxin 519-23-3, Ellipticine 520-85-4, Medroxyprogesteron 522-40-7, Fosfestrol 550-79-8, Afromosin 566-48-3, Formestane 599-79-1, Sulfasalazine 671-16-9, Procarbazine 863-03-6, Epicatechingallate 865-21-4, Vinblastin 989-51-5, Epigallocatechingallate 1177-14-6 1400-61-9, Nystatin 1403-66-3, Gentamycin 1404-00-8, Mitomycin 1405-87-4, Bacitracin 1508-45-8, Podophyllic acid-2-ethylhydrazide 1951-25-3, Amiodarone 2022-85-7, Flucytosine 2034-69-7, Daphnoretin 2086-83-1, Berberin 2210-63-1, Mofebutazone 2216-51-5, Levomenthol 2444-46-4, Nonivamide 2447-54-3, Sanguinarine 2751-09-9, Troleandomycin 2998-57-4, Estramustine 3116-76-5, Dicloxacillin 3484-37-5, Ovatodiolide 3737-09-5, Disopyramide 3778-73-2, Ifosfamide 3930-20-9, Sotalol Cladribine 4342-03-4, Dacarbazine 4707-32-8, β-Lapachone 6754-13-8, Helenalin 6805-41-0, Aescine 7689-03-4, Camptothecin 7712-50-7, Myrtecaine 8001-27-2, Hirudin 8025-81-8, Spiramycin 9001-12-1, Metalloproteinase-1 9002-01-1, Streptokinase 9002-92-0, Polidocanol 9015-68-3, Asparaginase 9039-53-6, Urokinase 9088-07-7, Natriuretic peptide 10540-29-1, Tamoxifen 11037-26-6, Mansonin 11056-06-7, Bleomycin 12244-57-4, Sodium aurothiomalate 13010-47-4, Lomustine 13063-04-2, Nitidine chloride 13063-06-4, Dihydronitidine 14110-64-6, Cytochalasin A 14930-96-2, Cytochalasin B 15078-28-1, Nitroprusside 15307-86-5, Diclofenac 15421-84-8, Trapidil 15663-27-1, Cisplatin 15687-27-1, Ibuprofen 16506-27-7, Bendamustine 16846-24-5, Josamycin 17951-19-8, Justicidin B 19622-83-4, Margetine 20089-98-9 20830-81-3, Daunomycin 21679-14-1, Fludarabine 21829-25-4, Nifedipine 22071-15-4, Ketoprofen 22089-22-1, Trofosfamide 22144-76-9, Cytochalasin C 22144-77-0, Cytochalasin D 22204-53-1, Naproxen 22570-53-2, Zeorin 22910-60-7, Ginkgolic acid 22916-47-8, Miconazole 23214-92-8, Doxorubicin 23288-49-5, Probucol 23593-75-1, Clotrimazole 25001-57-4, Justicidin A 25316-40-9, Adriamycin 25395-22-6, o-Carbamoylphenoxyacetic acid 25717-80-0, Molsidomine 25953-19-9, Cefazolin 27003-73-2, Lariciresinol 29679-58-1, Fenoprofen 29767-20-2, Teniposide 29908-03-0, Ademetionine 30220-43-0, Effusanin 30508-27-1, Licoricidin 30516-87-1, Zidovudine 31430-18-9, Nocodazole 31441-78-8, Mercaptopurine 32986-56-4, Tobramycin 33069-62-4, Paclitaxel 33419-42-0, Etoposide 33876-97-0, Sydnonimine-1 33996-33-7, Oxaceprol 34031-32-8, Auranofin 35121-78-9, Prostacyclin 35226-29-0, Usambarine 35457-80-8, Midecamycin 35607-66-0, Cefoxitin 35846-53-8, Maytansine 35963-37-2, Inotodiol 36011-19-5, Cytochalasin E 36150-14-8, Usambarensine 36150-15-9, Dihydrousambarensine 36322-90-4, Piroxicam 38748-32-2, Triptolide 38927-54-7, Isodeoxyelephantopin 40277-05-2, 4-Hydroxycyclophosphamide 41451-91-6, Erythromycine 41575-94-4, Carboplatin 41708-76-3, Indicine-N-oxide 42471-28-3, Nimustine 42617-41-4, Activated Protein C 50370-12-2, 51110-01-1, Somatostatin 51264-14-3, Amsacrine Cefadroxil 53123-88-9, Rapamycin 53164-05-9, Acemetacin 53230-10-7, Mefloquine 53643-48-4, Vindesine 53808-88-1, Lonazolac 53902-12-8, Tranilast 53910-25-1, Pentostatin 53948-07-5, Aristolactam-AII 53994-73-3, Cefaclor 54063-53-5, Propafenone 54143-55-4, Flecainide 55837-20-2, Halofuginone 56420-45-2, Epirubicin 56519-07-4, Akagerine 57576-44-0, Aclarubicin 58066-85-6, Miltefosine 58581-89-8, Azelastine 58957-92-9, Idarubicin 59015-79-1, Strebloside 59277-89-3, Acyclovir 59865-13-3, Cyclosporin A 60706-78-7, Hydroxyanopterine 61825-94-3, Oxaliplatin 62571-86-2, Captopril 62993-59-3, 5-O-Methylsorbifolin 62996-74-1, Staurosporin 63209-34-7, Strychnopentamine 65277-42-1, Ketoconazole 66107-60-6, Baccatin 67763-96-6, IGF-1 69306-88-3, Strychnophylline 70322-87-1, Vismione B 70322-88-2, Vismione A 71125-38-7, Meloxicam 71142-71-7, PPACK 71486-22-1, Vinorelbine

```
73981-34-7, Kamebakaurin
                                                 74863-84-6, Argatroban
     75207-66-8, Longikaurin B 75330-75-5, Lovastatin 75607-67-9
     75706-12-6, Leflunomide 75847-73-3, Enalapril
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
     76547-98-3, Lisinopril 78536-36-4, Excisanin B 78536-37-5, Exci 79439-84-2, Yadanzioside P 79498-26-3, Leukamenin A 79498-27-4,
IT
                                                            78536-37-5, Excisanin A
                    79902-63-9, Simvastatin 80214-83-1, Roxithromycin
     Leukamenin B
     80890-47-7, Concanamycin 81093-37-0, Pravastatin 81103-11-9,
     Clarithromycin 82151-95-9D, derivs. 82410-32-0, Ganciclovir 82657-92-9, Prourokinase 83905-01-5, Azithromycin 84316-84-7, Maytenfoliol 85287-59-8, Sculponeatin C 85505-64-2, Vapiprost
     85622-93-1, Temozolomide 85721-33-1, Ciprofloxacin 86293-25-6,
     Iso-Iridogermanal 88418-46-6, Marchantin A 88768-40-5, Cilazapril
     91161-71-6, Terbinafine 93957-54-1, Fluvastatin 94450-14-3,
     Acetylvismione B 95058-81-4, Gemcitabine 96203-70-2, Pancratistatin
     97682-44-5, Irinotecan 97915-43-0, 1-Hydroxy-11-Methoxycanthin-6-one 98932-70-8, Folimycin 99283-10-0, Molgramostim 101391-05-3, Brucean
                               99283-10-0, Molgramostim 101391-05-3, Bruceanol
                                      101560-00-3, Yadanzioside N 101809-47-6,
         101391-06-4, Bruceanol A
                  102040-03-9D, derivs.
                                             102567-16-8
                                                             102904-16-5,
     Mansonin E
     Mallotochromanol 102904-17-6, Mallotolerin 103839-24-3,
     1,11-Dimethoxycanthin-6-one 104987-11-3, Tacrolimus
                                                                 104987-12-4,
     Ascomycin 105608-32-0, Bryophyllin A 105661-18-5, Hippocaesculin
     107868-30-4, Exemestane 108736-35-2, Angiopeptin 108864-22-8,
     Tomenphantopin A 108864-23-9, Tomenphantopin B 109237-00-5,
     Stizophyllin 109351-36-2, Sinococuline 110024-07-2, Agrostistachin
     110187-24-1, Maquiroside A 110300-76-0, Taxamairin A 110300-77-1, Taxamairin B 110942-02-4, Aldesleukin 112078-76-9, Bisparthenolidine
     112809-51-5, Letrozole 112899-35-1, Bruceantinoside C 114076-69-6, Agroskerin 114076-70-9 114076-71-0 114586-21-9, Bruceanol C
     114727-97-8, Cudraisoflavone A 114798-26-4, Losartan 114828-46-5,
     Periplocoside A
                        114977-28-5, Docetaxel 116963-87-2, Manwuweizic acid
     118711-55-0, Hyptatic acid A 119188-33-9, Coronarin A 119188-35-1,
     Coronarin C 119188-37-3, Coronarin D 119188-38-4, Coronarin B 119459-76-6, Ghalakinoside 120511-73-1, Anastrozole 121181-53-1,
     Filgrastim 123948-87-8, Topotecan 127830-04-0, C-type natriuretic
     peptide 128270-60-0, Bivalirudin 128794-94-5, Mycophenolate mofetil
     129399-53-7, Isobutyrylmallotochromanol 130062-03-2,
     Larreatricin 130167-69-0, Pegaspargase 134523-00-5, Atorvastatin
     135968-09-1, Lenograstim 139639-23-9, Tissue plasminogen activator
     143090-92-0, Anakinra 143653-53-6, Abciximab
                                                          145599-86-6, Cerivastatin
     146480-35-5, Gelatinase A 147511-69-1, Pitavastatin 151499-39-7,
     Bafilomycin 152923-56-3, Daclizumab 153212-75-0, 6-\alpha-Hydroxy-Paclitaxel 154361-50-9, Capecitabine 159351-69-6, Everolimus
     169590-42-5, Celecoxib 178603-78-6 179045-86-4, Basiliximab
     185077-23-0, PI 88 185243-69-0, Etanercept 186256-67-7, Cryptophycin
         204205-90-3, D-24851 215647-85-1 265646-19-3, Indanocine
     287714-41-4, Rosuvastatin 305838-77-1, Neovastat 528900-03-0, Anginex
     643017-29-2 679809-58-6, Enoxaparin sodium 849777-84-0
                                                                       849777-86-2
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (biocompatible, biostable coating of medical surfaces composed of
        polysulfone and hydrophilic polymers)
TΤ
     9002-05-5, Blood-coagulation factor Xa
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitor antibody; biocompatible, biostable coating of medical
         surfaces composed of polysulfone and hydrophilic polymers)
IT
     80449-02-1
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitor; biocompatible, biostable coating of medical surfaces
         composed of polysulfone and hydrophilic polymers)
                                              127464-60-2, Vascular endothelial
                37353-41-6, Thioprotease
IT
     9015-82-1
     growth factor 329900-75-6, COX-2
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitors; biocompatible, biostable coating of medical surfaces
        composed of polysulfone and hydrophilic polymers)
```

9054-75-5, Guanylyl cyclase IT

RL: BSU (Biological study, unclassified); BIOL (Biological study) (stimulator, tissue inhibitor; biocompatible, biostable coating of medical surfaces composed of polysulfone and hydrophilic polymers)

IT 9004-61-9, Hyaluronic acid

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(biocompatible, biostable coating of medical surfaces composed of polysulfone and hydrophilic polymers)

RN 9004-61-9 HCAPLUS

Hyaluronic acid (8CI, 9CI) (CA INDEX NAME) CN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

102904-17-6, Mallotolerin 129399-53-7, IT

Isobutyrylmallotochromanol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (biocompatible, biostable coating of medical surfaces composed of polysulfone and hydrophilic polymers)

RN 102904-17-6 HCAPLUS

1-Butanone, 1-[3-[(3-acetyl-2,4-dihydroxy-6-methoxy-5-methylphenyl)methyl]-CN 2,4,6-trihydroxy-5-(2-hydroxy-3-methyl-3-butenyl)phenyl]- (9CI) (CA INDEX NAME)

129399-53-7 HCAPLUS RN

1-Propanone, 1-[6-[(3-acetyl-2,4-dihydroxy-6-methoxy-5-CN methylphenyl)methyl]-3,4-dihydro-3,5,7-trihydroxy-2,2-dimethyl-2H-1benzopyran-8-yl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ \text{OH} & & \\ \end{array}$$

ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN L30

2004:531324 HCAPLUS AN

141:94004 DN

ED Entered STN: 02 Jul 2004

Use of an alkyl ether of hydroxystilbene for the treatment of dry skin ΤI

Dalko, Maria; Rubinstenn, Gilles IN

PΑ

L'oreal, Fr. PCT Int. Appl., 28 pp. so

CODEN: PIXXD2

DT Patent

```
English
LΑ
     ICM A61K007-48
IC
     ICS A61P017-00; A61K031-085; A61K031-09
CC
     62-4 (Essential Oils and Cosmetics)
FAN.CNT 2
                                         APPLICATION NO.
                                                                  DATE
     PATENT NO.
                          KIND
                                  DATE
     ------
                          ----
                                  _____
                                              _____
                                                                       ------
                          A1
                                  20040701 WO 2003-EP12507
                                                                      20031110
     WO 2004054533
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                              FR 2002-16113
                                                                      20021218
     FR 2848844
                           A1
                                  20040625
     FR 2848844
                                  20050506
                           B1
                                  20021218
PRAI FR 2002-16113
                           Α
     US 2003-438775P
                           P
                                  20030109
CLASS
 PATENT NO.
                  CLASS PATENT FAMILY CLASSIFICATION CODES
                         ______
                 ----
 WO 2004054533
                  ICM
                         A61K007-48
                         A61P017-00; A61K031-085; A61K031-09
                  ICS
 WO 2004054533
                 ECLA
                         A61K008/33; A61Q019/00; A61Q019/08
                         A61K008/33; A61Q019/00; A61Q019/08
 FR 2848844
                  ECLA
os
     MARPAT 141:94004
     The present invention relates to a method for the cosmetic treatment of
AB
     dry skin or of a dry scalp, comprising the topical application to the skin
     or the scalp of a composition containing, in a physiol. acceptable medium, at least
     one alkyl ether of hydroxystilbene with a saturated or unsatd., linear or
     branched C1-C6 alc. The composition may be used for cosmetic purposes, for
     treating drying out of the skin, in particular after the menopause, or for
     dermatol. purposes, for treating disorders associated with oligoseborrheic
     dry skin, in particular forms of dermatitis. Resveratrol tri-Me ether (I)
     induced an increase in sebocytic lipogenesis. A cosmetic composition was
     prepared containing I.
     hydroxy stilbene alkyl ether dry skin; cosmetic dry skin resveratrol
ST
     trimethyl ether
     Antibacterial agents
IT
     Cosmetics
     Sophora japonica
         (an alkyl ether of hydroxystilbene for the treatment of dry skin)
IT
     Carboxylic acids, biological studies
     Fatty acids, biological studies
     Glycosphingolipids
     Lecithins
     Phospholipids, biological studies
     Polysaccharides, biological studies
     Steroids, biological studies
     Terpenes, biological studies
     RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
     study); USES (Uses)
         (an alkyl ether of hydroxystilbene for the treatment of dry skin)
IT
     Skin, disease
         (dry; an alkyl ether of hydroxystilbene for the treatment of dry skin)
TT
     Cosmetics
         (moisturizers; an alkyl ether of hydroxystilbene for the treatment of
        dry skin)
     22255-22-7, Resveratrol trimethyl ether
IT
     RL: BSU (Biological study, unclassified); COS (Cosmetic use); BIOL
     (Biological study); USES (Uses)
         (an alkyl ether of hydroxystilbene for the treatment of dry skin)
```

```
50-21-5, Lactic acid, biological studies 53-43-0, Dhea
                                                                 56-45-1,
     L-Serine, biological studies 56-81-5, Glycerol, biological studies
     57-13-6, Urea, biological studies 57-88-5, Cholesterol, biological
     studies 60-00-4, Edta, biological studies 69-72-7, Salicylic acid, biological studies 72-17-3, Sodium lactate 77-52-1, Ursolic acid
     77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid,
     biological studies 83-46-5, \beta-Sitosterol 83-48-7, Stigmasterol
     87-69-4, Tartaric acid, biological studies 87-99-0, Xylitol 90-64-2,
     Mandelic acid 122-99-6, Phenoxyethanol 123-99-9, Azelaic acid,
     biological studies 154-92-7, N-α-Benzoyl-L-arginine 472-15-1,
     Betulinic acid 474-62-4, Campesterol 490-79-9, Gentisic acid
     491-37-2, 4-Chromanone 501-36-0, Resveratrol 508-02-1, Oleanolic acid 621-82-9, Cinnamic acid, biological studies 1117-86-8, Caprylyl glycol
     1406-16-2, Vitamin d 1449-05-4, \beta-Glycyrrhetinic acid 3380-34-5,
     Triclosan 4602-84-0, Farnesol 6915-15-7, Malic acid
                                                                7365-45-9, Hepes
     7512-17-6, N-Acetylglucosamine 9004-61-9, Hyaluronic
     acid 9012-76-4, Chitosan 10438-94-5, Octoxy glycerin
     14246-53-8 19771-63-2, Procysteine
                                            28874-51-3, Sodium pidolate
     29348-79-6, Pentanediol 52357-35-4
                                            77554-84-8, Sodium methylglycine
     diacetate 78418-01-6, 5-Octanoylsalicylic acid 96702-03-3,
              131334-66-2 153490-07-4 607717-56-6
     RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
     study); USES (Uses)
        (an alkyl ether of hydroxystilbene for the treatment of dry skin)
              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Inaoka, Y; JP 01038009 A 1989 HCAPLUS
(2) Johnson & Johnson Consumer; WO 0143705 A 2001 HCAPLUS
(3) Oreal; EP 0953344 A 1999 HCAPLUS
(4) Oreal; EP 1029530 A 2000 HCAPLUS
(5) Ptchelintsev, D; WO 03055444 A 2003
(6) Rossi, F; WO 0191695 A 2001 HCAPLUS
(7) Rossi, F; WO 0191714 A 2001 HCAPLUS
   9004-61-9, Hyaluronic acid 78418-01-6
     , 5-Octanoylsalicylic acid
     RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
     study); USES (Uses)
        (an alkyl ether of hydroxystilbene for the treatment of dry skin)
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     78418-01-6 HCAPLUS
RN
     Benzoic acid, 2-hydroxy-5-(1-oxooctyl)- (9CI) (CA INDEX NAME)
```

HO
$$C-(CH_2)_6-Me$$

```
L30 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     2004:512212 HCAPLUS
AN
DN
     141:76375
ED
     Entered STN: 25 Jun 2004
     Use of an alkyl ether of hydroxystilbene for the treatment of dry skin
TI
IN
     Dalko, Maria; Rubinstenn, Gilles
PΑ
     L'oreal, Fr.
     Fr. Demande, 21 pp.
SO
     CODEN: FRXXBL
```

```
DT
     Patent
     French
LA
IC
     ICM A61K007-40
     ICS A61K007-06
     62-4 (Essential Oils and Cosmetics)
CC
     Section cross-reference(s): 63
FAN.CNT 2
                                            APPLICATION NO.
                                                                    DATE
     PATENT NO.
                         KIND
                                 DATE
                                                                     20021218
                                           FR 2002-16113
PΙ
     FR 2848844
                          A1
                                 20040625
                         B1
                                 20050506
     FR 2848844
     WO 2004054533
                          A1
                                 20040701
                                             WO 2003-EP12507
                                                                     20031110
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
         NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI FR 2002-16113 .
                          Α
                                 20021218
     US 2003-438775P
                          P
                                 20030109
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                ----
                        A61K007-40
 FR 2848844
                 TCM
                 ICS
                        A61K007-06
                        A61K008/33; A61Q019/00; A61Q019/08
FR 2848844
                 ECLA
WO 2004054533 ECLA
                        A61K008/33; A61Q019/00; A61Q019/08
     MARPAT 141:76375
OS
     The present invention relates to a cosmetic process of treatment of dry
AB
     skin or dry scalp, including the topical application on the skin or the
     scalp, of a composition containing at least one alkyl ether of hydroxystilbene with
     a C1-6 alc., linear or branched, saturated or unsatd. The composition can be used
     with fine cosmetics, to treat the drying of the skin, in particular after
     menopause, or for dermatol. purposes, for the treatment of disorders
     related to oligoseborrheic dry skin, in particular dermatitis.
     dermatitis dry skin cosmetic hydroxystilbene alkyl ether
st
IT
     Antibacterial agents
     Cosmetics
     Honey
     Seborrhea
        (alkyl ether of hydroxystilbene for the treatment of dry skin)
IT
     Ceramides
     Diglycerides
     Glycosphingolipids
     Lanolin
     Lecithins
     Petrolatum
     Phospholipids, biological studies
     Sphingolipids
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkyl ether of hydroxystilbene for the treatment of dry skin)
TT.
     Natural products, pharmaceutical
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (alkyl ether of hydroxystilbene for the treatment of dry skin)
TT
     Scalp
     Skin, disease
        (dry; alkyl ether of hydroxystilbene for the treatment of dry skin)
IT
     Cosmetics
        (emulsions; alkyl ether of hydroxystilbene for the treatment of dry
     Fatty acids, biological studies
```

```
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (essential; alkyl ether of hydroxystilbene for the treatment of dry
        skin)
IT
     Paeonia lactiflora
     Paeonia suffruticosa
     Sophora japonica
        (exts.; alkyl ether of hydroxystilbene for the treatment of dry skin)
TT
     Embryophyta
        (medicinal plant; alkyl ether of hydroxystilbene for the treatment of
        dry skin)
IT
     Cosmetics
        (moisturizers; alkyl ether of hydroxystilbene for the treatment of dry
        skin)
IT
     Triterpenes
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (pentacyclic; alkyl ether of hydroxystilbene for the treatment of dry
        skin)
IT
     Sterols
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (phyto-; alkyl ether of hydroxystilbene for the treatment of dry skin)
     50-21-5, Lactic acid, biological studies 53-43-0, Dhea 56-40-6D,
     Glycine, derivs. 56-45-1, Serine, biological studies 57-13-6, Urea,
     biological studies 57-88-5D, Cholesterol, derivs. 60-00-4, Edta,
     biological studies
                         72-17-3, Sodium lactate 77-52-1, Ursolic acid
     77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid,
     biological studies 83-46-5, \beta-Sitosterol 83-48-7, Stigmasterol
     87-69-4, Tartaric acid, biological studies 87-99-0, Xylitol
                                                                     90-64-2.
                   99-20-7, Trehalose 474-62-4, Campesterol 490-79-9,
     Mandelic acid
                    491-37-2, 4-Chromanone 501-36-0, Resveratrol 621-82-9,
     Gentisic acid
     Cinnamic acid, biological studies 2438-80-4D, Fucose, oligomers
     6915-15-7, Malic acid 7365-45-9, Hepes
                                              7512-17-6, N-Acetylglucosamine
     9004-61-9, Hyaluronic acid
                                 9012-76-4,
               19750-45-9, 2-Oxothiazolidine-4-carboxylic acid
                                                                28874-51-3,
     Sodium pidolate 29348-79-6, Pentanediol 78418-01-6, n-Octanoyl
     5-salicylic acid
                      96702-03-3, Ectoin 153490-07-4
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkyl ether of hydroxystilbene for the treatment of dry skin)
     30498-85-2D, Hydroxystilbene, alkyl ethers
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (alkyl ether of hydroxystilbene for the treatment of dry skin)
             THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Inaoka, Y; JP 01-038009 A 1989 HCAPLUS
(2) Johnson and Johnson Consumer; WO 0143705 A HCAPLUS
(3) Oreal; EP 0953344 A 1999 HCAPLUS
(4) Oreal; EP 1029530 A 2000 HCAPLUS
(5) Ptchelintsev, D; WO 03055444 A 2003
(6) Rossi, F; WO 0191695 A 2001 HCAPLUS
(7) Rossi, F; WO 0191714 A 2001 HCAPLUS
     9004-61-9, Hyaluronic acid 78418-01-6
IT
     , n-Octanoyl 5-salicylic acid
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkyl ether of hydroxystilbene for the treatment of dry skin)
RN
     9004-61-9 HCAPLUS
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     78418-01-6 HCAPLUS
RN
CN
     Benzoic acid, 2-hydroxy-5-(1-oxooctyl)- (9CI) (CA INDEX NAME)
```

HO
$$C-(CH_2)_6-Me$$

```
L30 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     2004:498643 HCAPLUS
AN
     142:43627
DN
ED
     Entered STN: 21 Jun 2004
TI.
     Characterization of protein release from photocrosslinkable
     hyaluronic acid-polyethylene glycol hydrogel tissue
     engineering scaffolds
     Leach, Jennie B.; Schmidt, Christine E.
ΔIJ
     Department of Chemical Engineering, The University of Texas at Austin,
CS
     Austin, TX, 78712, USA
     Biomaterials (2004), Volume Date 2005, 26(2), 125-135 CODEN: BIMADU; ISSN: 0142-9612
SO
PB
     Elsevier Science Ltd.
DT
     Journal
     English
LА
CC
     63-7 (Pharmaceuticals)
     Section cross-reference(s): 35
     The goal of this work was to utilize the naturally derived bioactive
AB
     polymer hyaluronic acid (HA) to create a combination
     tissue engineering scaffold and protein delivery device. HA is a
     non-immunogenic, non-adhesive glycosaminoglycan that plays significant
     roles in several cellular processes, including angiogenesis and the
     regulation of inflammation. In previous work, we created
     photopolymerizable glycidyl methacrylate-hyaluronic acid
     (GMHA) hydrogels that had controlled degradation rates, were cytocompatible,
     and were able to be modified with peptide moieties. In the present
     studies, we characterized the release of a model protein, bovine serum
     albumin (BSA), from GMHA and GMHA-polyethylene glycol (PEG) hydrogels.
     Although BSA could be released rapidly (>60% within 6 h) from 1% GMHA
     hydrogels, we found that increasing either the GMHA or the PEG concns.
     could lengthen the duration of protein delivery. Preliminary size
     exclusion chromatog. studies indicated that the released BSA was almost
     entirely in its native monomeric form. Lastly, protein release was
     extended to several weeks by suspending BSA-poly(lactic-co-glycolic acid)
     microspheres within the hydrogel bulk. These initial studies indicate
     that the naturally derived biopolymer HA can be employed to design novel
     photopolymerizable composites that are suitable for delivering stable
     proteins from scaffolding in tissue engineering applications.
ST
     serum albumin crosslinked hyaluronic acid PEG hydrogel
     tissue engineering
TΤ
     Composites
     Diffusion
     Dissolution
     Hydrogels
     Microspheres
        (characterization of protein release from photocrosslinkable
        hyaluronic acid-polyethylene glycol hydrogel tissue
        engineering scaffolds)
IT
     Animal tissue
        (engineering; characterization of protein release from
        photocrosslinkable hyaluronic acid-polyethylene
        glycol hydrogel tissue engineering scaffolds)
     Polyesters, biological studies
TT
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
```

```
(Uses)
        (hydroxycarboxylic acid-based; characterization of protein release from
        photocrosslinkable hyaluronic acid-polyethylene
        glycol hydrogel tissue engineering scaffolds)
    Prosthetic materials and Prosthetics
IT
        (implants, scaffolds for tissue engineering; characterization of
        protein release from photocrosslinkable hyaluronic
        acid-polyethylene glycol hydrogel tissue engineering scaffolds)
IT
    Albumins, biological studies
    RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (serum, bovine; characterization of protein release from
        photocrosslinkable hyaluronic acid-polyethylene
        glycol hydrogel tissue engineering scaffolds)
    106797-53-9, Irgacure 2959
    RL: CAT (Catalyst use); USES (Uses)
        (characterization of protein release from photocrosslinkable
        hyaluronic acid-polyethylene glycol hydrogel tissue
        engineering scaffolds)
    51728-26-8P
TT
    RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (characterization of protein release from photocrosslinkable
        hyaluronic acid-polyethylene glycol hydrogel tissue
        engineering scaffolds)
    34346-01-5, Glycolic acid-lactic acid copolymer 478369-82-3
TT
    RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (characterization of protein release from photocrosslinkable
        hyaluronic acid-polyethylene glycol hydrogel tissue
        engineering scaffolds)
    106-91-2, Glycidyl methacrylate 9004-61-9, Hyaluronic
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (characterization of protein release from photocrosslinkable
        hyaluronic acid-polyethylene glycol hydrogel tissue
        engineering scaffolds)
             THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Amsden, B; Macromolecules 1998, V31, P8382 HCAPLUS
(2) Andreopoulos, F; Biotechnol Bioeng 1999, V65, P579 HCAPLUS
(3) Andrianov, A; Biomaterials 1998, V19, P109 HCAPLUS
(4) Azegami, S; Langmuir 1999, V15, P940 HCAPLUS
(5) Baier Leach, J; Biotechnol Bioeng 2003, V82, P578
(6) Bos, G; Pharmaceutical Technol North Am 2001, V25, P110 HCAPLUS
(7) Castellanos, I; J Pharm Pharmacol 2001, V53, P1099 HCAPLUS
(8) Chorny, R; Ind Eng Chem Process Des Dev 1966, V5, P206 HCAPLUS
(9) Cleland, J; Curr Opin Biotechnol 2001, V12, P212 HCAPLUS
(10) Costantino, H; Pharm Res 2000, V17, P1374 HCAPLUS
(11) Crank, J; The mathematics of diffusion 1975
(12) Cruise, G; Biomaterials 1998, V19, P1287 HCAPLUS
(13) Davis, B; Proc Natl Acad Sci USA 1974, V71, P3120 HCAPLUS
(14) Ghezzo, E; Int J Pharm 1992, V87, P21 HCAPLUS
(15) Gombotz, W; Bioconj Chem 1995, V6, P332 HCAPLUS
(16) Griffith, L; Science 2002, V295, P1009 HCAPLUS
(17) Han, J; J Agric Food Chem 2000, V48, P5658 HCAPLUS
(18) Hatefi, A; J Control Release 2002, V80, P9 HCAPLUS
(19) Hern, D; J Biomed Mater Res 1998, V39, P266 HCAPLUS
(20) Hubbell, J; Biotechnology (NY) 1995, V13, P565 HCAPLUS
(21) Hubbell, J; J Control Release 1996, V39, P305 HCAPLUS
(22) Inukai, M; Chem Pharm Bull (Tokyo) 2000, V48, P850 HCAPLUS
(23) Jacobsen, S; Exp Neurol 1965, V11, P48
(24) Jain, R; Biomaterials 2000, V21, P2475 HCAPLUS
(25) Jin, Y; J Control Release 2001, V73, P173 HCAPLUS
(26) Johnson, O; Encyclopedia of controlled drug delivery 1999, P816
(27) Kim, B; Trends Biotechnol 1998, V16, P224 HCAPLUS
```

- (28) Kim, H; J Biomed Mater Res 2002, V59, P573 HCAPLUS
- (29) Kim, M; J Control Release 2002, V80, P69 HCAPLUS
- (30) Kwon, Y; Pharm Res 2001, V18, P1754 HCAPLUS
- (31) Larsen, N; Adv Drug Deliv Rev 1991, V7, P279 HCAPLUS
- (32) Leach, J; Encyclopedia of biomaterials and biomedical engineering, in press
- (33) Leach, J; J Biomed Mater Res, in press
- (34) Leach, W; Uniform encapsulation of protein nanoparticles produced by spray freezing for the reduction of burst, submitted for publication
- (35) Lee, K; Chem Rev 2001, V101, P1869 HCAPLUS
- (36) Lowman, A; J Biomater Sci Polym Ed 1999, V10, P999 HCAPLUS
- (37) Mann, B; J Biomed Mater Res 2002, V60, P86 HCAPLUS
- (38) Mellott, M; Biomaterials 2001, V22, P929 HCAPLUS
- (39) Narasimhan, B; Encyclopedia of controlled drug delivery 1999, P921
- (40) Perez, C; J Pharm Pharmacol 2002, V54, P301 HCAPLUS
- (41) Perez-Rodriguez, C; J Control Release 2003, V89, P71 HCAPLUS
- (42) Peters, T; All about albumin 1996
- (43) Politis, M; Brain Res 1982, V253, P1 MEDLINE
- (44) Ratner, B; J Control Release 2002, V78, P211 HCAPLUS
- (45) Reinhart, C; J Memb Sci 1984, V18, P227 HCAPLUS
- (46) Rowley, J; J Biomed Mater Res 2002, V60, P217 HCAPLUS
- (47) Saffran, M; Science 1986, V233, P1081 HCAPLUS
- (48) Simon, L; J Control Release 1999, V61, P267 HCAPLUS
- (49) Vercruysse, K; Crit Rev Ther Drug Carrier Syst 1998, V15, P513 HCAPLUS
- (50) Xu, S; Chem Pharm Bull (Tokyo) 2000, V48, P779 HCAPLUS
- (51) Yu, Z; Eur J Pharm Biopharm 2002, V54, P221 HCAPLUS
- (52) Yu, Z; Spray freezing into liquid for highly stable protein nanostuctured microparticles, submitted for publication
- (53) Zhu, G; Pharm Res 2000, V17, P351 HCAPLUS
- IT 106797-53-9, Irgacure 2959

RL: CAT (Catalyst use); USES (Uses)

(characterization of protein release from photocrosslinkable hyaluronic acid-polyethylene glycol hydrogel tissue engineering scaffolds)

- RN
- 106797-53-9 HCAPLUS 1-Propanone, 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methyl- (9CI) (CA CN INDEX NAME)

IT 478369-82-3

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(characterization of protein release from photocrosslinkable hyaluronic acid-polyethylene glycol hydrogel tissue engineering scaffolds)

478369-82-3 HCAPLUS RN

Hyaluronic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ether CN (9CI) (CA INDEX NAME)

CM

CRN 9004-61-9 CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

```
CM
     2
```

CRN 5919-74-4 CMF C7 H12 O4

```
OH
HO-CH2-CH-CH2-O-C-C-Me
```

```
9004-61-9, Hyaluronic acid
IT
```

RL: RCT (Reactant); RACT (Reactant or reagent) (characterization of protein release from photocrosslinkable hyaluronic acid-polyethylene glycol hydrogel tissue engineering scaffolds)

RN 9004-61-9 HCAPLUS

Hyaluronic acid (8CI, 9CI) (CA INDEX NAME) CN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

```
L30 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
```

ΑN 2003:779072 HCAPLUS

139:296978 DN

ED Entered STN: 05 Oct 2003

A sapogenin or a natural extract containing it for the treatment of ΤI oligoseborrheic dry skin

Rubinstenn, Gilles; Buan, Bruno IN

L'Oreal, Fr. PΑ

Fr. Demande, 23 pp. SO

CODEN: FRXXBL

DTPatent

LΑ French

ICM A61K007-48 ICS A61K007-06 IC

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

FAN.CNT 1

		_															
	PATENT NO.				KIND		DATE		AP	APPLICATION NO.				DATE			
							-										
PI	FR	2837	704			A1		2003	1003	FR	2002-	4072			20	00204	102
	FR	2837	704			B1		20050	0114								
	ΕP	1375509				A1 20040102			0102	EP 2003-290709					20030320		
		R:	AT,	ΒĒ,	CH,	DE,	DK,	, ES,	FR,	GB, G	R, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	, RO,	MK,	CY, A	L, TR,	BG,	CZ,	EE,	HU,	SK	
	US	2003	21632	27		A1		2003	1120	US	2003-	3939	89		20	00303	324
	JΡ	2003	3008	62		A2		2003	1021	JР	2003-	9838	9		20	00304	101
PRAI	FR	2002	-4072	2		Α		20020	0402								
	US	2002	-374	159P		P		20020	0422								
CLASS	3																
PATI	TMS	NO.		CLA	SS	PATE	NT I	TAMIL	Y CL	ASSIFIC	CATION	COD	ES				

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
		3.64VAAB 4A
FR 2837704	ICM	A61K007-48
	ICS	A61K007-06
FR 2837704	ECLA	A61K008/63; A61K008/97; A61Q019/00; A61Q019/08;
		C07J071/00; C07J075/00
EP 1375509	ECLA	A61K008/63; A61K008/97; A61Q019/00; A61Q019/08;
		C07J071/00; C07J075/00
US 2003216327	NCL	514/026.000
	ECLA	A61K008/63; A61K008/97; A61Q019/00; A61Q019/08;
		C07J071/00; C07J075/00

AB The present invention relates to the use of a composition containing at least a sapogenin, or a natural extract containing the sapogenin for the treatment of the oligoseborrheic dry skin or dry scalp. Cosmetic compns. can be used to treat the dry skin, in particular after menopause, or for the treatment of the disorders related to the oligoseborrheic dry skins, in particular of

```
the dermatitis. Preferred sapogenins are the hecogenin and the diosgenin.
     Thus, an ointment contained diosgenin 1, salicylic acid 1, glycerol
     monostearate 3, propylene glycol 12, petrolatum 82.9, and water qs to
     100%.
     sapogenin natural ext oligoseborrheic dry skin
ST
     Fats and Glyceridic oils, biological studies
TT
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (Calophyllum; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
тт
     Fats and Glyceridic oils, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (Echium; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Fats and Glyceridic oils, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (black currant; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Cosmetics
        (creams; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Carbonates, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (cyclo-; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Scalp
     Skin, disease
        (dry; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Cosmetics
     Drug delivery systems
        (emulsions; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
     Fatty acids, biological studies
IT
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (essential; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Algae
     Chamomile
     Sophora japonica
        (exts.; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
ΙT
     Fats and Glyceridic oils, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (fish; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
ΙT
     Drug delivery systems
        (gels, topical; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Cosmetics
     Drug delivery systems
        (gels; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
     Carboxylic acids, biological studies
TT
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (hydroxy; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Skin
        (keratinocyte; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
```

```
IT
     Cosmetics
     Drug delivery systems
        (lotions; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Cosmetics
        (moisturizers; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
     Fats and Glyceridic oils, biological studies
IT
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (musk rose; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
     Drug delivery systems
IT
        (ointments, creams; sapogenin or natural extract containing it for treatment
        of oligoseborrheic dry skin)
IT
     Drug delivery systems
        (ointments; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
TТ
    Triterpenes
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (pentacyclic; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
    Aloe barbadensis
    Anti-inflammatory agents
    Antibacterial agents
     Bacopa monnieri
     Boswellia serrata
     Centipeda cunninghamii
     Cola nitida
     Cosmetics
     Dermatitis
     Epilobium angustifolium
     Helianthus annuus
     Iris pallida
     Laminaria saccharina
     Paeonia lactiflora
     Paeonia suffruticosa
     Pygeum
     Rosa gallica
     Rosmarinus officinalis
     Seborrhea
     Vitreoscilla filiformis
        (sapogenin or natural extract containing it for treatment of oligoseborrheic
        dry skin)
IT
     Canola oil
     Ceramides
     Diglycerides
     Glycosphingolipids
     Lanolin
     Lecithins
     Oligosaccharides, biological studies
     Petrolatum
     Phospholipids, biological studies
     Polysaccharides, biological studies
     Retinoids
     Sterols
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (sapogenin or natural extract containing it for treatment of oligoseborrheic
        dry skin)
     Fats and Glyceridic oils, biological studies
TT
     RL: COS (Cosmetic use); PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (sesame; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
```

```
IT
     Drug delivery systems
        (topical; sapogenin or natural extract containing it for treatment of
        oligoseborrheic dry skin)
IT
     Fats and Glyceridic oils, biological studies
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (unsatd., ω-3; sapogenin or natural extract containing it for treatment
        of oligoseborrheic dry skin)
IT
                           512-04-9, Diosgenin
                                                  31566-31-1, Glyceryl
     467-55-0, Hecogenin
     monostearate
     RL: COS (Cosmetic use); PAC (Pharmacological activity); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (sapogenin or natural extract containing it for treatment of oligoseborrheic
        dry skin)
     50-21-5, Lactic acid, biological studies
                                               50-23-7, HydroCortisone
IT
     53-06-5, Cortisone 53-43-0, DHEA 53-43-0D, DHEA, derivs.
                                                                     53-86-1.
     Indomethacin 56-45-1, Serine, biological studies
                                                         56-81-5, Glycerol,
     biological studies 57-13-6, Urea, biological studies 57-88-5,
     Cholesterol, biological studies 57-88-5D, Cholesterol, derivs.
     60-00-4, EDTA, biological studies 60-00-4D, EDTA, acyl derivs.
     68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, Salicylic acid,
     biological studies 72-17-3, Sodium lactate
                                                     77-52-1, Ursolic acid
     77-60-1, Tigogenin
                          77-92-9, Citric acid, biological studies
     Glycolic acid, biological studies 83-46-5, \beta-Sitosterol
                                                                 83-48-7.
     Stigmasterol 87-69-4, Tartaric acid, biological studies
                                                                  87-99-0,
     Xylitol 90-64-2, Mandelic acid 97-59-6, Allantoin 99-20-7, Trehalose
                                                              123-99-9,
     99-20-7D, Trehalose, derivs. 122-99-6, Phenoxyethanol
     Azelaic acid, biological studies 126-18-1, Smilagenin 154-92-7, N-\alpha-Benzoyl-L-arginine 378-44-9, Betamethasone
                                                                126-19-2
     154-92-7, N-\alpha-Benzoyl-L-arginine
     472-15-1, Betulinic acid 474-62-4, Campesterol 490-79-9, Gentisic acid
     491-37-2, 4-Chromanone 501-36-0, Resveratrol 508-02-1, Oleanolic acid
     511-97-7, Yuccagenin 512-06-1, Yamogenin 515-69-5, α-Bisabolol
     621-82-9, Cinnamic acid, biological studies 1117-86-8, Caprylyl glycol
     1406-16-2, Vitamin D 1406-16-2D, Vitamin D, derivs. 1449-05-4, \beta-Glycyrrhetinic acid 1449-05-4D, \beta-Glycyrrhetinic acid,
     derivs. 4602-84-0, Farnesol 6829-55-6D, Tocotrienol, derivs.
     7365-45-9, HEPES 7512-17-6, N-Acetylglucosamine 9004-61-9,
     Hyaluronic acid 9004-61-9D, Hyaluronic
     acid, derivs. 9012-76-4, Chitosan 10438-94-5, Octoxy glycerin
     14246-53-8, Capryloyl glycine 16283-36-6, Zinc Salicylate 19771-63-2,
                   28874-51-3, Sodium pidolate 29348-79-6, Pentanediol
     Procysteine
     77554-84-8, Sodium methyl glycine diacetate 78418-01-6,
                                                       96702-03-3D, Ectoin,
     5-Octanoyl salicylic acid 96702-03-3, Ectoin
              100441-38-1
                            104365-75-5, Glyceryl polyacrylate
                                                                  131334-66-2
                                                       607717-56-6
     311313-38-9, Vitamin E diphosphate 607717-55-5
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (sapogenin or natural extract containing it for treatment of oligoseborrheic
        dry skin)
RE.CNT 6
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Lvmh Rech; FR 2673840 A 1992 HCAPLUS
(2) Meybeck, A; US 5723149 A 1998 HCAPLUS
(3) Oreal; FR 2811561 A 2002 HCAPLUS
(4) Oreal; FR 2811567 A 2002 HCAPLUS
(5) Rubinstenn, G; US 6331535 B1 2001 HCAPLUS
(6) Rubinstenn, G; US 2002028186 A1 2002 HCAPLUS
     9004-61-9, Hyaluronic acid 9004-61-9D
     , Hyaluronic acid, derivs. 78418-01-6,
     5-Octanoyl salicylic acid
     RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (sapogenin or natural extract containing it for treatment of oligoseborrheic
        dry skin)
RN
     9004-61-9 HCAPLUS
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
```

```
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9004-61-9 HCAPLUS
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     78418-01-6 HCAPLUS
     Benzoic acid, 2-hydroxy-5-(1-oxooctyl)- (9CI) (CA INDEX NAME)
CN
               (CH<sub>2</sub>)<sub>6</sub>-Me
      CO2H
L30 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     2003:397101 HCAPLUS
DN
     138:403139
     Entered STN: 23 May 2003
ED
ΤI
     Application of hydrophilic coatings to biomedical articles
     Chabrecek, Peter; Leukel, Joerg; Biedermann, Hynek; Lohmann, Dieter
IN
     Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
PA
SO
     PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
     ICM G02B001-04
IC
     ICS A61L027-34
CC
     42-10 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 38, 63
FAN.CNT 1
                                             APPLICATION NO.
                                                                      DATE
     PATENT NO.
                          KIND
                                 DATE
                                -----
     -----
                          ----
                                              ______
                                                                      -----
                                           WO 2002-EP12658
                          A1
                                20030522
PΙ
     WO 2003042724
                                                                      20021112 <--
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU,
             LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG,
         SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR
                          AA 20030522
                                           CA 2002-2467092
                                                                    20021112 <--
     CA 2467092
     US 2003219533
                          A1
                                 20031127
                                             US 2002-292836
                                                                      20021112 <--
                                 20050412
     US 6878399
                          B2
     EP 1451615
                          A1
                                 20040901
                                             EP 2002-779553
                                                                      20021112 <--
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     JP 2005512115
                           T2
                                 20050428
                                           JP 2003-544501
                                                                     20021112 <--
PRAI EP 2001-811088
                                 20011113
                           А
                                            <--
     WO 2002-EP12658
                           W
                                 20021112
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                         ......
 WO 2003042724
                 ICM
                         G02B001-04
                 ICS
                         A61L027-34
 WO 2003042724
                 ECLA
                        A61L027/34; A61L027/50; G02B001/04B2
                                                                                <--
 US 2003219533
                 NCL
                         427/162.000
                         A61L027/34; A61L027/50; G02B001/04B2
                 ECLA
                                                                                <--
                FTERM 2H006/BB10; 2H006/BC05; 4C081/AB22; 4C081/AB23;
 JP 2005512115
                         4C081/BA03; 4C081/BB01; 4C081/CA012; 4C081/CA082;
```

4C081/CA152; 4C081/CA181; 4C081/CA271; 4C081/CC01; 4C081/CC03; 4C081/CD082; 4C081/DA01; 4C081/DB07;

```
4C081/DC03; 4C081/EA02; 4C081/EA06; 4D075/CA37;
                         4D075/DB11; 4D075/DB31; 4D075/DC30; 4D075/EB22;
                         4D075/EB42; 4F006/AA42; 4F006/AB42; 4F006/BA10;
                         4F006/CA05
                                                                                <--
     The invention relates to a process for coating a material surface,
AB
     comprising the steps of: (a) providing an inorg. or organic bulk material;
     (b) providing one or more polyionic materials at least one of them
     comprising covalently bound initiator moieties for radical polymerization; (c)
     applying the polyionic material of step (b) to the bulk material of step
     (a), thereby forming a hydrophilic layer on the bulk material surface; and
     (d) graft polymerizing a hydrophilic monomer or macromonomer onto said
     polyionic material. The coated articles that are obtainable by the
     process of the invention have desirable characteristics regarding
     adherence to the substrate, durability, hydrophilicity, wettability,
     biocompatibility and permeability and are thus useful for the manufacture of
     biomedical articles such as ophthalmic devices. Thus, diluting a 25% aqueous
     polyacrylic acid with 500 mL water, adding 1.9 g 1-[3-
     (\texttt{dimethylamino}) \, \texttt{propyl} \, \texttt{]-3-ethylcarbodiimide} \, \, \texttt{hydrochloride} \, \, \texttt{dissolved} \, \, \texttt{in} \, \, \texttt{5} \, \, \texttt{mL}
     water, 2.1 q N-hydroxysulfosuccinimide Na salt dissolved in 5 mL water,
     and 2.67 g 2-hydroxy-2-methyl-1-[4-[2-(2-hydroxyethylamino)ethoxy]phenyl]-
     1-propanone initiator, stirring at pH 9 overnight gave polyacrylic acid
     having pendant photoinitiator groups. Lotrafilcon A lenses (polysiloxane-perfluoroalkyl polyether copolymer) was immersed on a 0.001
     M aqueous solution of the above-described polyacrylic acid having pendant
     photoinitiator groups for 5 min and directly immersed in a 0.001 M aqueous
     polyallylamine hydrochloride solution for 5 min. This treated lens was
     immersed in a solution of a product of 0.81 g isocyanatoethyl methacrylate
     and 7.5 g telomer prepared by reaction of 99.5 g acrylamide with 15.6 g
     cysteamine hydrochloride in the presence of 2,2 -azobisisobutyramidine
     hydrochloride and exposed to UV light for 2 min to give a lens with
     water-air contact angles 0, 0, 0° adv., rec., and hysteresis,
     resp., compared with 101, 64, and 37°, resp. for nonmodified lens.
ST
     graft polymer hydrophilic coating ophthalmic lens; acrylamide cysteamine
     telomer isocyanatoethyl methacrylate deriv hydrophilic coating lens;
     polyallylamine hydrochloride hydrophilic coating ophthalmic lens;
     polyacrylic acid ketone ester hydrophilic coating ophthalmic lens;
     polysiloxane perfluoropolyether lens hydrophilic coating
тт
     Intraocular lenses
        (application of hydrophilic coatings to biomedical articles such as
        intraocular lenses)
IT
     Contact lenses
        (application of hydrophilic coatings to biomedical articles such as
        ophthalmic lenses)
IT
        (artificial cornea; application of hydrophilic coatings to biomedical
        articles such as artificial corneas)
IT
     Polymerization
        (graft, photochem.; in application of hydrophilic coatings to
        biomedical articles such as ophthalmic lenses)
IT
     Coating materials
        (hydrophilic coatings; application of hydrophilic coatings to
        biomedical articles such as ophthalmic lenses)
ΙT
     Polysiloxanes, uses
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); TEM (Technical or engineered material use); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
        (polyether-, perfluoro, Lotrafilcon A, lenses; application of
        hydrophilic coatings to biomedical articles such as ophthalmic lenses)
     Fluoropolymers, uses
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); TEM (Technical or engineered material use); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
        (polyether-polysiloxane-, Lotrafilcon A, lenses; application of
        hydrophilic coatings to biomedical articles such as ophthalmic lenses)
```

```
TT
     Polyethers, uses
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); TEM (Technical or engineered material use); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
        (polysiloxane-, perfluoro, Lotrafilcon A, lenses; application of
        hydrophilic coatings to biomedical articles such as ophthalmic lenses)
TT
     249758-93-8P
                    302352-91-6P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (coating component precursor; application of hydrophilic coatings to
        biomedical articles such as ophthalmic lenses)
     530112-85-7P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (coating component; application of hydrophilic coatings to biomedical
        articles such as ophthalmic lenses)
     9002-98-6DP, reaction products with hydroxy[(succimidooxycarbonylmethoxy)p
TТ
     henyl]methylpropanone 9004-61-9DP, Hyaluronic
     acid, reaction products with hydroxy
     [[(hydroxyethylamino)ethoxy]phenyl]
                       30674-80-7DP, reaction products with
     methylpropanone
                                                  249758-93-8DP, reaction
     acrylamide-cysteamine hydrochloride telomer
     products with isocyanatoethyl methacrylate
                                                  302352-91-6DP, reaction
                                                  528870-63-5DP, reaction
     products with isocyanatoethyl methacrylate
     products with polyethyleneimine
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);
     USES (Uses)
        (coating component; application of hydrophilic coatings to biomedical
        articles such as ophthalmic lenses)
     71550-12-4, Polyallylamine hydrochloride
TT
     RL: TEM (Technical or engineered material use); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (coating component; application of hydrophilic coatings to biomedical
        articles such as ophthalmic lenses)
     4098-71-9DP, Isophorone diisocyanate, reaction products with
TT
     (hydroxyethoxy) phenylhydroxypropyl ketone and polyallylamine
     30551-89-4DP, Polyallylamine, reaction products with
     (hydroxyethoxy) phenylhydroxypropyl ketone-isophorone diisocyanate
     127770-74-5P, 2-Hydroxy-1-[4-(2-methanesulfonyloxyethoxy)phenyl]-2-methyl-
     1-propanone
                  528870-62-4P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (precursor; application of hydrophilic coatings to biomedical articles
        such as ophthalmic lenses)
     124-63-0, Methanesulfonyl chloride 106797-53-9
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (precursor; application of hydrophilic coatings to biomedical articles
        such as ophthalmic lenses)
              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Ciba Geigy Ag; WO 9620796 A 1996 HCAPLUS
(2) Novartis Erfind Verwalt Gmbh; WO 9935520 A 1999 HCAPLUS
(3) Novartis Erfind Verwalt Gmbh; WO 9957581 A 1999 HCAPLUS
(4) Novartis Erfind Verwalt Gmbh; WO 0192924 A 2001 HCAPLUS
(5) Novartis Erfind Verwalt Gmbh; EP 1095711 A 2001 HCAPLUS
(6) Novartis Erfind Verwalt Gmbh; EP 1095966 A 2001 HCAPLUS
(7) Novartis Erfind Verwalt Gmbh; WO 02094331 A 2002 HCAPLUS
    9004-61-9DP, Hyaluronic acid, reaction
     products with hydroxy[[(hydroxyethylamino)ethoxy]
     phenyl]methylpropanone
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation);
     USES (Uses)
        (coating component; application of hydrophilic coatings to biomedical
        articles such as ophthalmic lenses)
```

2002:905941 HCAPLUS

AN

L30 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN

```
137:389246
DN
     Entered STN: 29 Nov 2002
ED
     Bottle-brush type coatings with entangled hydrophilic polymer for
ΤI
     biomedical uses
TN
    Chabrecek, Peter; Leukel, Joerg; Lohmann, Dieter
PΑ
    Novartis Aq, Switz.; Novartis-Erfindungen Verwaltungsgesellschaft M.B.H.
SO
     PCT Int. Appl., 50 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
    ICM A61L027-34
     63-7 (Pharmaceuticals)
     Section cross-reference(s): 37
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
                                 -----
     -----
                         ____
                                             -----
                                                                     -----
                                           WO 2002-EP5495
PΤ
     WO 2002094331
                         A1
                                20021128
                                                                     20020517 <--
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VN, YU, ZA, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR
     US 2003008063
                          A1
                                 20030109
                                             US 2002-142300
                                                                     20020509 <--
    US 6835410
                          B2
                                 20041228
    EP 1395302
                          A1
                                 20040310
                                             EP 2002-727603
                                                                     20020517 <--
                                 20050202
     EP 1395302
                          B1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004536633
                          T2
                                 20041209
                                             JP 2002-591047
                                                                     20020517 <--
                                             AT 2002-727603
    AT 288289
                          Ε
                                 20050215
                                                                     20020517 <--
PRAI EP 2001-810503
                          Α
                                 20010521
                                           <--
     WO 2002-EP5495
                          W
                                 20020517
CLASS
 PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
                ----
 -----
                        _____
                        A61L027-34
WO 2002094331
                 ICM
WO 2002094331
                 ECLA
                        A61L027/34
                                                                              <--
US 2003008063
                 NCL
                        427/002.100
```

```
<---
                 ECLA
                        A61L027/34
 JP 2004536633
                 FTERM 4C081/AB22; 4C081/AB23; 4C081/BA03; 4C081/CA08;
                        4C097/AA25; 4C097/BB01; 4C097/CC03; 4C097/DD02;
                        4C097/EE01; 4D075/BB42Z; 4D075/BB46Z; 4D075/CA31;
                        4D075/CA37; 4D075/DA04; 4D075/DA06; 4D075/DA11;
                        4D075/DA15; 4D075/DA23; 4D075/DB01; 4D075/DB11; 4D075/DB13; 4D075/DB14; 4D075/DB20; 4D075/DB32;
                        4D075/DB35; 4D075/DB36; 4D075/DB37; 4D075/DB38;
                        4D075/DB39; 4D075/DB40; 4D075/DB43; 4D075/DB47;
                        4D075/DB48; 4D075/DB50; 4D075/DB53; 4D075/DB54;
                        4D075/DC24; 4D075/DC30; 4D075/EA07; 4D075/EA21;
                        4D075/EB07; 4D075/EB16; 4D075/EB19; 4D075/EB20;
                        4D075/EB22; 4D075/EB24; 4D075/EB33; 4D075/EB38;
                        4D075/EC07; 4D075/EC37; 4F073/AA01; 4F073/BA27;
                        4F073/BA33; 4F073/BA52; 4F073/BB02; 4F073/FA01;
                        4J038/CP001; 4J038/FA23; 4J038/NA06; 4J038/NA11;
                        4J038/NA12; 4J038/PA07; 4J038/PB08; 4J127/AA03;
                        4J127/AA06; 4J127/BB021; 4J127/BB041; 4J127/BB081;
                        4J127/BB101; 4J127/BB211; 4J127/BB221; 4J127/BC021;
                        4J127/BC031; 4J127/BC131; 4J127/BC141; 4J127/BC151;
                        4J127/BD061; 4J127/BE44X; 4J127/BE441; 4J127/BE51Y;
                        4J127/BE511; 4J127/BG30Y; 4J127/BG301; 4J127/DA38;
                        4J127/DA41; 4J127/DA46; 4J127/DA47; 4J127/EA12; 4J127/EA13; 4J127/EA21; 4J127/EA29; 4J127/FA07;
                        4J127/FA08; 4J127/FA25; 4J127/FA26; 4J127/FA43
AB
     A process for coating a material surface comprises the steps of: (a)
     providing an inorg. or organic bulk material having covalently bound to its
     surface initiator moieties for radical polymerization; and (b) graft polymerizing a
     hydrophilic ethylenically unsatd. macromonomer from the bulk material
     surface in the presence of a biocompatible hydrophilic polymer being
     devoid of polymerizable ethylenically unsatd. groups and thereby
     entrapping said hydrophilic polymer within the polymer matrix formed by
     the polymerization of the macromonomer. Composite materials obtainable according
     to the process of the invention have desirable characteristics regarding
     adherence to the substrate, durability, hydrophilicity, wettability,
     biocompatibility and permeability and are thus useful for the manufacture of
     biomedical articles such as ophthalmic devices. Examples are given for
     photografting of Lotrafilcon A contact lenses with macromers and preparation of
     telomers.
ST
     macromer telomer prepn photografting contact intraocular lens; hydrophilic
     polymer biomedical coating
IT
     Eye
        (artificial cornea; bottle-brush type coatings with entangled
        hydrophilic polymer for biomedical uses)
IT
     Contact lenses
     Intraocular lenses
        (bottle-brush type coatings with entangled hydrophilic polymer for
        biomedical uses)
     Macromonomers
     Telomers (polymers)
     RL: DEV (Device component use); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (bottle-brush type coatings with entangled hydrophilic polymer for
        biomedical uses)
TТ
     Mucins
     Polyoxyalkylenes, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (bottle-brush type coatings with entangled hydrophilic polymer for
        biomedical uses)
IT
     Prosthetic materials and Prosthetics
        (composites, implants, ophthalmic; bottle-brush type coatings with
        entangled hydrophilic polymer for biomedical uses)
IT
     Polymerization
        (graft, photochem.; bottle-brush type coatings with entangled
```

```
hydrophilic polymer for biomedical uses)
TТ
     Coating process
        (plasma spraying; bottle-brush type coatings with entangled hydrophilic
        polymer for biomedical uses)
     Polyoxyalkylenes, biological studies
IT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (polyamine-; bottle-brush type coatings with entangled hydrophilic
        polymer for biomedical uses)
IT
     Polysiloxanes, biological studies
     RL: DEV (Device component use); RCT (Reactant); THU (Therapeutic use);
     BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
        (polyether-, perfluoro, functionalized, ethylenically unsatd. derivs.,
        graft polymers; bottle-brush type coatings with entangled hydrophilic
        polymer for biomedical uses)
IT
     Polysiloxanes, biological studies
     RL: DEV (Device component use); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (polyether-, perfluoro; bottle-brush type coatings with entangled
        hydrophilic polymer for biomedical uses)
     Fluoropolymers, biological studies
IT
     RL: DEV (Device component use); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
        (polyether-polysiloxane-, functionalized, ethylenically unsatd.
        derivs., graft polymers; bottle-brush type coatings with entangled
        hydrophilic polymer for biomedical uses)
     Fluoropolymers, biological studies
TΤ
     RL: DEV (Device component use); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (polyether-polysiloxane-; bottle-brush type coatings with entangled
        hydrophilic polymer for biomedical uses)
TТ
     Polyamines
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (polyoxyalkylene-; bottle-brush type coatings with entangled
        hydrophilic polymer for biomedical uses)
     Polyethers, biological studies
IT
     RL: DEV (Device component use); RCT (Reactant); THU (Therapeutic use);
     BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (polysiloxane-, perfluoro, functionalized, ethylenically unsatd.
        derivs., graft polymers; bottle-brush type coatings with entangled
        hydrophilic polymer for biomedical uses)
     Polyethers, biological studies
IT
     RL: DEV (Device component use); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (polysiloxane-, perfluoro; bottle-brush type coatings with entangled
        hydrophilic polymer for biomedical uses)
TT
     Coating process
        (spray; bottle-brush type coatings with entangled hydrophilic polymer
        for biomedical uses)
     121-44-8DP, Triethylamine, IPDI-functionalized ketone alc. derivs.,
IT
     reaction products with polysiloxane polyethers, graft polymer derivs.
     694-83-7DP, 1,2-Diaminocyclohexane, reaction products with polysiloxane
                                          4098-71-9DP, reaction products with
     polyethers, graft polymer derivs.
     hydroxybutanones and polysiloxane polyethers, graft polymer derivs.
     30674-80-7DP, reaction products with polysiloxane polyethers, graft
     polymer derivs. 106797-53-9DP, Darocur 2959,
     IPDI-functionalized, reaction products with polysiloxane polyethers, graft
                       180681-42-9DP, IPDI-functionalized, reaction products
     polymer derivs.
     with polysiloxane polyethers, graft polymer derivs.
                                                             249758-93-8DP,
     isocyanatoethyl methacrylate-functionalized, photografting derivs.
     249758-93-8P 302352-91-6DP, isocyanatoethyl methacrylate-functionalized,
     photografting derivs. 302352-91-6P
                                             415900-81-1DP, reaction products
```

with polysiloxane polyethers, graft polymer derivs. 476337-31-2DP, IPDI-functionalized, reaction products with polysiloxane polyethers, graft polymer derivs.

RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(bottle-brush type coatings with entangled hydrophilic polymer for biomedical uses)

1398-61-4D, Chitin, carboxyalkyl derivs. 9002-89-5, Polyvinyl alcohol 9003-01-4D, Polyacrylic acid, crosslinked 9003-05-8, Polyacrylamide 9003-39-8, Polyvinylpyrrolidone 9004-32-4, Carboxymethyl cellulose 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic acid 9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulfate 9012-76-4D, Chitosan, carboxyalkyl derivs. 9067-32-7, Sodium hyaluronate 25322-68-3, Polyethylene glycol 33410-59-2, PolyHEMA 138757-68-3, Carbopol 981 RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(bottle-brush type coatings with entangled hydrophilic polymer for biomedical uses)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Ciba Geigy Ag; WO 9620919 A 1996 HCAPLUS
- (2) Novartis Ag; WO 9957581 A 1999 HCAPLUS
- (3) Novartis Erfind Verwalt Gmbh; EP 1095966 A 2001 HCAPLUS
- IT 106797-53-9DP, Darocur 2959, IPDI-functionalized, reaction products with polysiloxane polyethers, graft polymer derivs.

 RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(bottle-brush type coatings with entangled hydrophilic polymer for biomedical uses)

- RN 106797-53-9 HCAPLUS
- CN 1-Propanone, 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methyl- (9CI) (CA INDEX NAME)

IT 9004-61-9, Hyaluronic acid 9067-32-7

, Sodium hyaluronate

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(bottle-brush type coatings with entangled hydrophilic polymer for biomedical uses)

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9067-32-7 HCAPLUS

CN Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

- L30 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
- AN 2001:850724 HCAPLUS
- DN 135:376535
- ED Entered STN: 23 Nov 2001
- TI Composition for make-up or skin-care in a powdery form containing a

```
particular binder
     Hadasch, Anke; Lemann, Patricia; Simonnet, Jean-tierry
IN
PA
     L'oreal, Fr.
SO
     Eur. Pat. Appl., 21 pp.
    CODEN: EPXXDW
\mathbf{DT}
     Patent
     French
LА
     ICM A61K007-035
TC
CC
     62-4 (Essential Oils and Cosmetics)
FAN.CNT 1
                               DATE
                                           APPLICATION NO.
                                                                  DATE
    PATENT NO.
                        KIND
                         - - - <del>-</del>
                                           _____
                                           EP 2001-401249
                                                                  20010515 <--
    EP 1155676
                               20011121
PΙ
                         A2
     EP 1155676
                         A3
                               20021218
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                                           FR 2000-6448
                                                                  20000519 <--
     FR 2808999
                               20011123
                         A1
     FR 2808999
                               20021031
                         B1
                                                                . 20010517 <--
                                           JP 2001-148415
    JP 2002020236
                         A2
                               20020123
                                                                  20010518 <--
     CN 1331967
                         Α
                               20020123
                                           CN 2001-122173
                                                                  20010521 <--
     US 2002041854
                        A1
                               20020411
                                           US 2001-860567
                               20000519
PRAI FR 2000-6448
                         А
                                        <--
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 -----
                       ______
                       A61K007-035
 EP 1155676
              . ICM
                       A61K008/02H; A61K008/14; A61K008/34D; A61Q001/12
                                                                           <--
 EP 1155676
                ECLA
                ECLA
 FR 2808999
                       A61K008/02H; A61K008/14; A61K008/34D; A61Q001/12
                                                                           <--
 US 2002041854
                NCL
                       424/063.000
                       A61K008/02H; A61K008/14; A61K008/34D; A61Q001/12
                                                                           <--
                ECLA
OS
    MARPAT 135:376535
    A make-up composition contains a powdery phase and a binding phase which a
AB
     continuous aqueous phase. A binding phase contained iso-Pr myristate 1.64,
     castor oil 2.46, vaseline oil 12.36, liquid lanolin 1.26, water 70.95,
     imidazolinyl urea 0.3, glycerin 5, Acylglutamate HS-11 0.03, phytantriol
     2.97, vaseline 2.28, chlorphenesine 0.25, and polyoxyethylene sorbitan
     monopalmitate 0.5%. A cosmetic make-up contained talc 77.06, iron oxide
     2.74, Nylon powder 10, titanium oxide 1, preservative 0.2, and above
    binding phase 9%.
    makeup cosmetic powder particle binding phase
ST
IT
    Amino acids, biological studies
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (N-acyl; composition for make-up or skin-care in powdery form containing
        particular binder)
TΤ
     Sulfonic acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (alkyl derivs.; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
     Betaines
     Quaternary ammonium compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (alkyl; composition for make-up or skin-care in powdery form containing
       particular binder)
ΙT
     Quaternary ammonium compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (alkylbenzyldimethyl, chlorides; composition for make-up or skin-care in
       powdery form containing particular binder)
     Fats and Glyceridic oils, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (animal; composition for make-up or skin-care in powdery form containing
```

```
particular binder)
IT
     Cosmetics
        (antiaging; composition for make-up or skin-care in powdery form containing
        particular binder)
IT
     Fats and Glyceridic oils, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (avocado; composition for make-up or skin-care in powdery form containing
        particular binder)
TТ
     Polyelectrolytes
        (cationic; composition for make-up or skin-care in powdery form containing
        particular binder)
IT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (cetyl Me, di-Me; composition for make-up or skin-care in powdery form
        containing particular binder)
     Aloe barbadensis
     Alopecia
     Anthraquinone dyes
     Anti-inflammatory agents
     Antibacterial agents
     Azo dyes
     Caramel (color)
     Ceramics
     Deodorants
     Dyes
     Fungicides
     Gelation agents
     Humectants
     Insecticides
     Microcapsules
     Microspheres
     Pearl
     Pigments, nonbiological
     Reducing agents
     Sequestering agents
     Stabilizing agents
     Sunscreens
     Suntanning agents
     Surfactants
        (composition for make-up or skin-care in powdery form containing particular
IT
     Alcohols, biological studies
     Carbon black, biological studies
     Castor oil
     Corn oil
     Corticosteroids, biological studies
     Cottonseed oil
     Ethers, biological studies
     Fatty acids, biological studies
     Flavonoids
     Fluoropolymers, biological studies
     Glycerides, biological studies
     Hydrocarbon oils
     Isoalkanes
     Jojoba oil
     Kaolin, biological studies
     Lactoferrins
     Mica-group minerals, biological studies
     Olive oil
     Paraffin oils
     Peanut oil
     Peptides, biological studies
     Phosphatidic acids
     Polyamides, biological studies
```

```
Polyesters, biological studies
     Polymers, biological studies
     Polysiloxanes, biological studies
     Polyurethanes, biological studies
     Rape oil
     Retinoids
     Sapogenins
     Soaps
     Soybean oil
     Sunflower oil
     Tocopherols
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (composition for make-up or skin-care in powdery form containing particular
       binder)
IT
     Amines, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (composition for makeup or skin care in powdery form containing particular
       binder)
IT
     Cosmetics
     Hair preparations
        (conditioners; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
    Dyes
        (direct; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
     Hair preparations
        (dyes, oxidative; composition for make-up or skin-care in powdery form
        containing particular binder)
IT
    Hair preparations
        (dyes; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
     Fatty acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (essential, glycerides; composition for make-up or skin-care in powdery form
       containing particular binder)
ΙT
     Fatty acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (ethoxylated; composition for make-up or skin-care in powdery form containing
       particular binder)
TТ
     Centella asiatica
        (extract, composition for make-up or skin-care in powdery form containing
       particular binder)
IT
     Cosmetics
        (eye liners; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
    Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (fatty; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
     Cosmetics
        (foundations; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
     Carboxylic acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hydroxy; composition for make-up or skin-care in powdery form containing
       particular binder)
    Amino acids, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (lipo; composition for make-up or skin-care in powdery form containing
```

```
particular binder)
TT
    Cosmetics
        (lipsticks; composition for make-up or skin-care in powdery form containing
       particular binder)
TT
    Cosmetics
        (makeups; composition for make-up or skin-care in powdery form containing
       particular binder)
TT
    Cosmetics
        (mascaras; composition for make-up or skin-care in powdery form containing
       particular binder)
    Fats and Glyceridic oils, biological studies
ΤT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (mink; composition for make-up or skin-care in powdery form containing
       particular binder)
TT
    Sterols
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (phyto; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
    Alcohols, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyhydric; composition for make-up or skin-care in powdery form containing
       particular binder)
TТ
    Cosmetics
        (powders; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
    Fats and Glyceridic oils, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (sesame; composition for make-up or skin-care in powdery form containing
       particular binder)
TТ
    Fats and Glyceridic oils, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (turtle; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
    Fats and Glyceridic oils, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (vegetable; composition for make-up or skin-care in powdery form containing
       particular binder)
IT
        (wrinkle-preventing; composition for make-up or skin-care in powdery form
       containing particular binder)
    50-70-4, Sorbitol, biological studies 50-81-7, Vitamin c, biological
IT
             52-90-4, Cysteine, biological studies 55-56-1, Chlorhexidine
    studies
    57-10-3, Palmitic acid, biological studies
                                                57-11-4, Stearic acid,
    biological studies 57-88-5, Cholesterol, biological studies
                                                                    58-08-2.
    Caffein, biological studies
                                  58-55-9, Theophylline, biological studies
    60-18-4D, Tyrosine, derivs.
                                  60-23-1, Cysteamine
                                                       60-33-3, Linoleic
    acid, biological studies 68-11-1, Thioglycolic acid, biological studies
   68-26-8, Retinol 69-72-7, Salicylic acid, biological studies
                                                                    69-72-7D,
    Salicylic acid, derivs. 70-30-4, Hexachlorophene
                                                        79-14-1, Glycolic
    acid, biological studies 79-81-2, Retinol palmitate
                                                           81-13-0, Panthenol
    91-53-2, Ethoxyquine 93-60-7, Methyl nicotinate
                                                        96-26-4,
    Dihydroxyacetone 107-46-0, Hexamethyldisiloxane
                                                        110-27-0, Isopropyl
    myristate 111-01-3, Squalane 112-80-1, Oleic acid, biological studies
    112-85-6, Behenic acid 112-92-5, Stearyl alcohol
                                                        118-00-3, Guanosine,
                                                     123-95-5, Butylstearate
    biological studies 120-72-9D, Indole, derivs.
    124-07-2D, Caprylic acid, glycerides
                                           125-33-7, Hexamidine
                                                                  127-47-9.
    Retinol acetate
                     137-66-6, Ascorbyl palmitate
                                                     141-94-6, Hexetidine
```

143-28-2, Oleyl alcohol 302-79-4, Retinoic acid 302-79-4D.

334-48-5D, Capric acid, glycerides 463-40-1,

142-91-6, Isopropyl

142-47-2D, Monosodium glutamate, acyl derivs.

palmitate

Retinoic acid, derivs.

```
Linolenic acid 464-92-6, Asiatic acid 471-34-1, Calcium carbonate,
    biological studies 497-76-7, Arbutin 501-30-4, Kojic acid 515-69-5,
    α-Bisabolol
                 540-97-6 541-02-6 544-63-8, Myristic acid,
    biological studies 546-93-0, Magnesium carbonate 556-67-2
                                                                    616-91-1.
    N-Acetyl cysteine 1190-73-4, N-Acetyl cysteamine
                                                        1256-86-6,
    Cholesteryl sulfate 1306-06-5, Hydroxyapatite 1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconium oxide, biological studies
    1332-37-2, Iron oxide, biological studies 1406-18-4, Vitamin e
    2197-63-9, Dicetylphosphate 2915-57-3 3380-34-5, Triclosan
    4358-16-1, Cholesteryl phosphate 6640-03-5, Dimyristylphosphate
     7069-42-3, Retinol propionate 7235-40-7, β-Carotene
                                                            7440-39-3D,
    Barium, salts, biological studies 7440-67-7D, Zirconium, salts,
    biological studies 7440-70-2D, Calcium, salts, biological studies
     7631-86-9, Silica, biological studies 7787-59-9, Bismuth oxychloride
    9001-92-7, Protease 9002-84-0, Polytetrafluoroethylene 9002-88-4,
    Polyethylene 9003-27-4, Polyisobutene
                                             9003-53-6, Polystyrene
    9004-61-9, Hyaluronic acid 9005-25-8,
                                 9011-14-7, Polymethylmethacrylate
    Starch, biological studies
    9016-00-6, Polydimethylsiloxane 9067-32-7, Sodium
    hyaluronate 10043-11-5, Boron nitride, biological studies
    11042-64-1, \gamma-Orizanol 11103-57-4, Vitamin a 11118-57-3,
    Chromium oxide 11129-18-3, Cerium oxide 12240-15-2, Ferric Blue
    13463-67-7, Titanium oxide, biological studies 14807-96-6, Talc,
    biological studies 16690-92-9D, Disodium glutamate, acyl derivs.
    17181-54-3, β-Glycerophosphate 19660-77-6, Chlorophyllin
    20545-92-0, Pur-cellin 22766-83-2, 2-Octyldodecyl myristate
    23597-82-2, Hexyl nicotinate 24937-14-2, Poly(β-alanine)
    25513-34-2, Poly(\beta-alanine)
                                 26545-51-7, Diethyl toluamide
                                          29468-20-0, Pyridinethione
    26942-95-0, Glycerin triisostearate
    29806-73-3, 2-Ethyl-hexyl palmitate 30399-84-9, Isostearic acid
    31807-55-3, Isododecane 31900-57-9, Polydimethylsiloxane
    Hexyl laurate 34362-27-1, 2-Hexyl decyl laurate 34513-50-3,
                    36653-82-4, Cetanol 37309-58-3, Polydecene
    Octyldodecanol
    38304-91-5, Minoxidil 38517-23-6, Acylglutamate HS-11 42131-25-9,
                            56275-01-5 57568-20-4, 2-Octyldodecyl lactate
    Isononyl isononanoate
    57654-76-9 60554-19-0 60908-77-2, Isohexadecane 68890-66-4,
    Octopirox 70424-62-3 70942-90-4, Glyceol 74563-64-7, Phytantriol
    78418-03-8, n-Dodecanoyl 5-salicylic acid 80208-78-2, Glycerol
    thioglycolate 81230-05-9, Diisostearyl malate 108910-78-7, Magnesium
                        120486-24-0, Diglycerin triisostearate 127278-53-9
    ascorbyl phosphate
    134112-33-7, 2-Octyl decyl palmitate 145278-13-3 156218-15-4
    197912-25-7 200260-57-7 374538-88-2D, derivs.
                                                        374690-63-8
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (composition for make-up or skin-care in powdery form containing particular
       binder)
    7440-32-6, Titanium, biological studies
                                              7440-66-6, Zinc, biological
    studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (nano-; composition for make-up or skin-care in powdery form containing
       particular binder)
    9004-61-9, Hyaluronic acid 9067-32-7
     , Sodium hyaluronate 78418-03-8, n-Dodecanoyl
     5-salicylic acid
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (composition for make-up or skin-care in powdery form containing particular
       binder)
    9004-61-9 HCAPLUS
    Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    9067-32-7 HCAPLUS
    Hyaluronic acid, sodium salt (9CI) (CA INDEX NAME)
```

IT

IT

RN

CN

RN

CN

```
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 78418-03-8 HCAPLUS
CN Benzoic acid, 2-hydroxy-5-(1-oxododecyl)- (9CI) (CA INDEX NAME)
```

```
L30 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     1999:505749 HCAPLUS
ΑN
DN
     131:134425
    Entered STN: 16 Aug 1999
ED
     Cleaning patch for improving the skin condition
IN
     Gueret, Jean-Louis
PA
     L'Oreal, Fr.
     Eur. Pat. Appl., 10 pp.
     CODEN: EPXXDW
DΤ
     Patent
LΑ
     French
     ICM A61K007-00
IC
     ICS A61K007-50
CC
     62-4 (Essential Oils and Cosmetics)
FAN. CNT 1
     PATENT NO.
                                                                   DATE
                        KIND
                                DATE
                                            APPLICATION NO.
                        ____
                                -----
                                                                    -----
PΤ
                                19990804
                                            EP 1998-403340
                                                                   19981230 <--
     EP 933077
                         A1
     EP 933077 ·
                         B1
                                20030212
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
     FR 2774287
                                19990806
                                          FR 1998-1070
                                                                   19980130 <--
                         A1
     FR 2774287
                         B1
                                20000512
                                           AT 1998-403340
    AT 232378
                         E
                                20030215
                                                                   19981230 <--
     ES 2192314
                         TЗ
                                20031001
                                           ES 1998-403340
                                                                   19981230 <--
     CA 2257493
                         AA
                                19990730
                                            CA 1999-2257493
                                                                   19990119 <--
     JP 11269032
                                           JP 1999-14767
                                                                   19990122 <--
                         A2
                               19991005
                                           MX 1999-968
     MX 9900968
                        Α
                                20000831
                                                                   19990126 <--
     CN 1227095
                         Α
                                19990901
                                           CN 1999-101713
                                                                   19990129 <--
                         Α
PRAI FR 1998-1070
                                19980130
                                         <--
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                -----
EP 933077
                ICM
                       A61K007-00
                ICS A61K007-50
ECLA A61K008/02C; A61Q019/10
ECLA A61K008/02C; A61Q019/10
EP 933077
                                                                             <--
                       A61K008/02C; A61Q019/10
A61K008/02C; A61Q019/10
                ECLA
FR 2774287
                                                                             <--
AT 232378
                ECLA
                                                                             <--
ES 2192314
                ECLA A61K008/02C; A61Q019/10
                                                                             <--
                ECLA A61K008/02C; A61Q019/10
                                                                             <--
CA 2257493
JP 11269032
                ECLA A61K008/02C; A61Q019/10
                                                                             <--
                       A61K008/02C; A61Q019/10
CN 1227095
                ECLA
     A cleaning patch for improving skin conditions comprises a polymeric
    matrix which contains an active ingredient. A skin patch contained
     acrylic polymer in Et acetate 69.5%, Blue de Prusse pigment 0.5, urea 20,
     and salicylic acid 10%. The patch is used for the treatment of acne.
    cleaning patch skin disease acrylic polymer; salicylic acid urea acne skin
ST
     patch
     Vinyl compounds, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
```

```
(Uses)
        (carboxy-containing, polymers; cleaning patch for improving skin condition)
TT
     Antibiotics
     Centella asiatica
     Cotton fibers
     Honey
     Pigments, nonbiological
     Yeast
        (cleaning patch for improving skin condition)
TT
     Acrylic polymers, biological studies
     Amino acids, biological studies
Carbon black, biological studies
     Caseins, biological studies
     Ceramides
     Enzymes, biological studies
     Gelatins, biological studies
     Jojoba oil
     Kaolin, biological studies
     Mucopolysaccharides, biological studies
     Phospholipids, biological studies
     Polyamides, biological studies
     Polypropene fibers, biological studies
     Polysiloxanes, biological studies
Polyurethanes, biological studies
     Proteins, general, biological studies
     Salts, biological studies
     Sphingomyelins
     Tannins
     Waxes
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (cleaning patch for improving skin condition)
TТ
     Fatty acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (essential; cleaning patch for improving skin condition)
     Polyolefin fibers
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (ethylene; cleaning patch for improving skin condition)
     Melissa
TT
     Microalgae
     Rosemary
        (extract; cleaning patch for improving skin condition)
     Carboxylic acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hydroxy, esters; cleaning patch for improving skin condition)
     Carboxylic acids, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hydroxy; cleaning patch for improving skin condition)
IT
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oligopeptides; cleaning patch for improving skin condition)
IT
     Colloids
        (phycocolloids; cleaning patch for improving skin condition)
IT
     Vinyl compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polymers; cleaning patch for improving skin condition)
TT
     Anti-inflammatory agents
        (steroidal; cleaning patch for improving skin condition)
IT
     Plastics, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
```

(Uses)

(thermoplastics; cleaning patch for improving skin condition) TΤ 50-14-6, Vitamin d2 50-21-5, biological studies 50-78-2, Acetyl salicylic acid 50-81-7, L-Ascorbic acid, biological studies 57-13-6, Urea, biological studies 57-50-1, Sucrose, biological studies Vitamin h 59-02-9, D- α -Tocopherol 59-30-3, Folic acid, biological studies 67-97-0, Vitamin d3 68-26-8, Retinol Retinol, esters 69-72-7, biological studies 77-92-9, biological 79-14-1, biological studies 79-81-2, Retinol palmitate 83-88-5, Vitamin b2, biological studies 87-69-4, biological studies 90-64-2, Mandelic acid 97-59-6, Allantoin 117-39-5, Quercetin 123-31-9, 1,4-Benzenediol, biological studies 137-66-6, Ascorbyl palmitate 464-92-6, Asiatic acid 471-53-4, Glycyrrhetic acid 501-30-4, Kojic acid 515-69-5, α-Bisabolol 1309-37-1, Iron oxide (Fe2O3), biological studies 1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconium oxide, biological studies 1332-37-2, Iron oxide, biological studies 1406-16-2, Vitamin d 1449-05-4, β-Glycyrrhetinic acid 4602-84-0, Farnesol 5281-04-9, Dc red # 7 6915-15-7, Malic acid 7069-42-3, Retinol propionate 7235-40-7, β Carotene 8059-24-3, Vitamin b6 9000-01-5, Gum arabic 9000-30-0, Guar 9000-65-1, Gum tragacanth 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9004-34-6D, Cellulose, semi-synthetic derivs., biological studies 9004-61-9, Hyaluronic acid 9005-25-8, Starch, biological studies 10191-41-0, DL- α -Tocopherol 11032-50-1, Vitamin pp 11118-57-3, Chromium oxide 11129-18-3, Cerium oxide 13463-67-7, Titanium oxide, biological studies 16830-15-2, Asiaticoside 18449-41-7, Madecassic 24937-78-8, Ethylene vinyl acetate copolymer 29548-30-9, Farnesyl acetate 52225-20-4, DL- α -Tocopherol acetate 74563-64-7, Phytanetriol 78418-01-6, n-Octanoyl-5-salicylic acid RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cleaning patch for improving skin condition)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Lavipharm; FR 2750050 A 1997 HCAPLUS
- (2) The Procter And Gamble Co; WO 9402674 A 1994
- IT 9004-61-9, Hyaluronic acid 78418-01-6

, n-Octanoyl-5-salicylic acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cleaning patch for improving skin condition)

- RN 9004-61-9 HCAPLUS
- CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- RN 78418-01-6 HCAPLUS
- CN Benzoic acid, 2-hydroxy-5-(1-oxooctyl)- (9CI) (CA INDEX NAME)

HO
$$C-(CH_2)_6-Me$$

- L30 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
- AN 1999:337097 HCAPLUS
- DN 131:23323
- ED Entered STN: 02 Jun 1999
- TI Norlignans with hyaluronidase inhibitory activity from Anemarrhena

```
asphodeloides
ΑU
     Jeong, Sei-Joon; Ahn, Nyeon-Hyoung; Kim, Youn-Chul; Inagaki, M.; Miyamoto,
     T.; Higuchi, R.
CS
     College Pharmacy, Wonkwang Univ., Iksan, 570749, S. Korea
     Planta Medica (1999), 65(4), 367-368
SO
     CODEN: PLMEAA; ISSN: 0032-0943
PR
     Georg Thieme Verlag
DT
     Journal
     English
LА
     63-4 (Pharmaceuticals)
CC
     Section cross-reference(s): 7, 11
AB
     Assay-guided fractionation of an MeOH extract of Anemarrhena asphodeloides
     furnished hyaluronidase inhibitory norlignans cis-hinokiresinol and
     1,3-bis(4-hydroxyphenyl)-4-penten-1-one and inactive 4'-methyl-cis-
     hinokiresinol.
ST
     norlignan hyaluronidase inhibitor Anemarrhena
IT
     Anemarrhena asphodeloides
     New natural products
        (norlignans with hyaluronidase inhibitory activity from Anemarrhena
        asphodeloides)
IT
     Lignans
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BSU (Biological study, unclassified); BIOL (Biological
     study); OCCU (Occurrence)
        (norlignans with hyaluronidase inhibitory activity from Anemarrhena
        asphodeloides)
IT
     79004-25-4
                  96895-25-9, cis-Hinokiresinol 226417-45-4
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BSU (Biological study, unclassified); BIOL (Biological
     study); OCCU (Occurrence)
        (norlignans with hyaluronidase inhibitory activity from Anemarrhena
        asphodeloides)
IT
     37326-33-3, E.C. 3.2.1.35
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (norlignans with hyaluronidase inhibitory activity from Anemarrhena
       asphodeloides)
             THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Cox, J; Nature 1967, V216, P1328 HCAPLUS
(2) Jeong, S; Kor J Pharmacogn 1997, V28, P131
(3) Kakegawa, H; Chem Pharm Bull 1985, V33, P642 HCAPLUS
(4) Koda, A; J Allergy Clin Immunol 1976, V57, P396 HCAPLUS
(5) Tang, W; Chinese Drugs of Plant Origin 1992, P105
(6) Tsui, W; Phytochemistry 1996, V43, P1413 HCAPLUS
(7) Tung, J; Anal Biochem 1994, V223, P149 HCAPLUS
TT
     226417-45-4
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BSU (Biological study, unclassified); BIOL (Biological
     study); OCCU (Occurrence)
        (norlignans with hyaluronidase inhibitory activity from Anemarrhena
```

Absolute stereochemistry. Rotation (+).

asphodeloides)

226417-45-4 HCAPLUS

RN

CN

4-Penten-1-one, 1,3-bis(4-hydroxyphenyl)-, (3R)- (9CI) (CA INDEX NAME)

```
TT
    37326-33-3, E.C. 3.2.1.35
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
       (norlignans with hyaluronidase inhibitory activity from Anemarrhena
       asphodeloides)
RN
    37326-33-3 HCAPLUS
    Hyaluronoglucosaminidase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L30 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
    1998:700961 HCAPLUS
AN
DN
    130:7409
ED
   Entered STN: 04 Nov 1998
    Transdermal patches for drug delivery
ΤI
IN
    Gueret, Jean-Louis H.
PA
    L'Oreal S. A., Fr.
    Jpn. Kokai Tokkyo Koho, 9 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LА
    Japanese
IC
    ICM A61K009-70
    ICS A61K009-70
    63-6 (Pharmaceuticals)
CC
FAN.CNT 1
                                      APPLICATION NO.
                                                             DATE
    PATENT NO.
                      KIND DATE
                     ----
    -----
                                        ______
                             19981027 JP 1998-93612
                      A2
    JP 10287559
                                                              19980406 <--
                      B2
                            19990308
    JP 2865659
    FR 2761889
                      A1
                            19981016 FR 1997-4498
                                                             19970411 <--
    FR 2761889
                      B1
                            19991231
                                      EP 1998-400647
                      A1 19981014
                                                             19980319 <--
    EP 870498
    EP 870498
                       B1
                             20050511
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE,
           SI, LT, LV, FI, RO
    MX 9802825
                      A
                             20000731
                                        MX 1998-2825
                                                              19980408 <--
                                        CA 1998-2232616
                                                             19980409 <--
    CA 2232616
                       AA
                             19981011
                      C
    CA 2232616
                             20040622
                                      US 1998-58883
                             20010828
                                                             19980413 <--
    US 6280765
                       B1
                       Α
                             19970411 <--
PRAI FR 1997-4498
CLASS
              CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 ______
 JP 10287559 ICM A61K009-70
               ICS
                     A61K009-70
              ECLA A61K009-70
ECLA A61K007/48Z2B; A61K009/70E
 FR 2761889
              ECLA A61K008/02C; A61K009/70E
 EP 870498
                      424/449.000; 424/400.000; 424/402.000; 424/443.000;
 US 6280765
              NCL
                      424/445.000; 424/447.000
               ECLA A61K007/48Z2B; A61K009/70E
AB
    Patches which deliver lipid-soluble drugs and water-soluble drugs at the same
    time, comprise hydrophobic polymers containing the active agents, water
    absorbents, and oils. A mixture containing sweet almond oils (containing
    trans-retinol), microcryst. vitamin C, polyacrylic acid powder, and
    organopolysiloxane (DC 3.6486) was cured and the mixture was applied on a
    polyethylene sheet to a thickness of 0.8 mm. The sheet was assembled with
    self-adhesive silicone matrix to give a transdermal patch.
    transdermal patch water sol insol drug delivery; ascorbate retinol
ST
    polyacrylate polyethylene sheet patch
    Vinyl compounds, biological studies
IT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
       (carboxy-containing, polymers; transdermal patches containing both lipid-soluble
       compds. and water-soluble compds. on hydrophobic polymeric layer)
IT
    Centella asiatica
    Rosemary
```

```
(exts.; transdermal patches containing both lipid-soluble compds. and
       water-soluble compds. on hydrophobic polymeric layer)
TT
     Anti-inflammatory agents
       (steroidal; transdermal patches containing both lipid-soluble compds. and
       water-soluble compds. on hydrophobic polymeric layer)
ΙT
     Drug delivery systems
        (tapes; transdermal patches containing both lipid-soluble compds. and
       water-soluble compds. on hydrophobic polymeric layer)
IT
     Cotton fibers
        (transdermal patches containing both lipid-soluble compds. and water-soluble
       compds. on hydrophobic polymeric layer)
IT
     Amino acids, biological studies
     Balsams
     Caseins, biological studies
     Glycerides, biological studies
     Mucopolysaccharides, biological studies
     Peptides, biological studies
     Phospholipids, biological studies
     Polyesters, biological studies
     Polysiloxanes, biological studies
     Polyurethanes, biological studies
     Protein hydrolyzates
     Silicone rubber, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (transdermal patches containing both lipid-soluble compds. and water-soluble
       compds. on hydrophobic polymeric layer)
     50-14-6, Vitamin D2 50-21-5D, Lactic acid, esters
                                                          50-78-2,
    Acetylsalicylic acid 57-13-6, Urea, biological studies 58-95-7,
     D-\alpha-Tocopherol acetate 59-02-9, D-\alpha-Tocopherol
                                                      67-97-0,
                68-26-8, Retinol 69-72-7D, Salicylic acid, esters
    Vitamin D3
     77-92-9, Citric acid, biological studies 79-14-1D, Glycolic acid, esters
     79-81-2, Retinyl palmitate 81-13-0, D-Panthenol 83-88-5, Riboflavin,
     biological studies 91-53-2, Ethoxyquin 97-59-6, Allantoin
                                                                   117-39-5,
     Quercetin 123-31-9, 1,4-Benzenediol, biological studies 137-66-6,
    Ascorbyl palmitate 464-92-6, Asiatic acid 471-53-4 501-30-4, Kojic
          515-69-5, α-Bisabolol 1406-16-2, Vitamin D 4602-84-0,
     Farnesol 7069-42-3, Retinyl propionate 7235-40-7, β-Carotene
     8059-24-3, Vitamin B6 9000-01-5, Arabic gum 9000-30-0, Guar gum
     9000-65-1, Tragacanth gum 9002-86-2, Polyvinyl chloride
                                                                9002-88-4
    9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic acid
     9004-34-6, Cellulose, biological studies 9004-61-9,
     Hyaluronic acid 9005-25-8, Starch, biological studies
     9016-00-6, Dimethylsilanediol polymer sru 10191-41-0,
                     16830-15-2, Asiaticoside
                                                18449-41-7, Madecassic
           24937-78-8, Ethylene-vinyl acetate copolymer 29548-30-9, Farnesyl
             31900-57-9, Dimethylsilanediol polymer
                                                       52225-20-4,
     acetate
                             74563-64-7, Phytantriol 78418-01-6
     DL-α-Tocopheryl acetate
     5-Octanoyl salicylic acid
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (transdermal patches containing both lipid-soluble compds. and water-soluble
       compds. on hydrophobic polymeric layer)
    9004-61-9, Hyaluronic acid 78418-01-6
IT
      5-Octanoyl salicylic acid
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (transdermal patches containing both lipid-soluble compds. and water-soluble
       compds. on hydrophobic polymeric layer)
    9004-61-9 HCAPLUS
RN
    Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    78418-01-6 HCAPLUS
     Benzoic acid, 2-hydroxy-5-(1-oxooctyl)- (9CI) (CA INDEX NAME)
CN
```

```
HO C-(CH_2)_6-Me
```

```
L30 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
     1996:551335 HCAPLUS
AN
DN
     125:171106
ED
     Entered STN: 17 Sep 1996
     Functionalization of surfaces by coating and products therefrom
TI
IN
     Chabrecek, Peter; Lohmann, Dieter
PΑ
     Ciba-Geigy A.-G., Switz.
SO
     PCT Int. Appl., 57 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM B05D003-14
ICS B05D003-06; G02B001-04
IC
     42-10 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 63
FAN.CNT 5
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
     ______
                          ----
                                 -----
                                              ______
                                 19960711 WO 1995-EP5013
                                                                     19951218 <--
     WO 9620796
                         A1
PΤ
         W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP,
         KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
             NE, SN, TD, TG
     CA 2208710
                                 19960711
                                             CA 1995-2208710
                                                                      19951218 <--
     AU 9643874
                                             AU 1996-43874
                                                                      19951218 <--
                          A1
                                 19960724
     AU 698098
                          B2
                                 19981022
     BR 9510292
                                 19971111
                                              BR 1995-10292
                                                                      19951218 <--
                           Α
                                             EP 1995-942693
     EP 808222
                                 19971126
                                                                      19951218 <--
                          A1
     EP 808222
                          B1
                                 19990519
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE
                                                                19951218 <--
                                 19980225
                                          CN 1995-197514
     CN 1174525
                          А
                                             JP 1995-520702
                                                                      19951218 <--
     JP 10511600
                          T2
                                 19981110
                                             AT 1995-942693
                                                                      19951218 <--
     AT 180185
                          E
                                 19990615
     ES 2134514
                                 19991001
                                             ES 1995-942693
                                                                      19951218 <--
                          Т3
     ZA 9511003
                         Α
                                 19960701
                                             ZA 1995-11003
                                                                      19951228 <--
                                                                      19970623 <--
     FI 9702699
                          Α
                                 19970822
                                             FI 1997-2699
     NO 9703022
                          Α
                                 19970825
                                             NO 1997-3022
                                                                      19970627 <--
PRAI CH 1994-3967
                          Α
                                 19941230
                                           <--
     WO 1995-EP5013
                           W
                                 19951218
                                           <--
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 _____
                 ----
                        ______
                 ICM
                         B05D003-14
 WO 9620796
                         B05D003-06; G02B001-04
                 ICS
                         C07C271/20; C07C271/24; C07C271/28; C08F002/50;
 WO 9620796
                 ECLA
                         C08F283/12D; C08F290/02; C08F290/04A; C08G018/50C6;
                         C08G018/50F2; C08G018/61; C08G018/64F9; C08G018/70;
                         C08G018/80; C08G018/80H4; C08G018/81K3B4;
                         C08G018/81K3B2; C08G077/442; G02B001/04B2;
                         G02B001/04B2+C08L51/08S; G03F007/027; G03F007/031;
                         G03F007/075M
     The coating process comprises the use of a functional photoinitiator based
```

```
on an aminoacetophenone and a diisocyanate, or a macroinitiator derived
     therefrom, in a cascade of process steps. Coated films and contact lenses
     with good wettability are obtained. Thus, 2-ethyl-2-(dimethylamino)-1-[4-
     (2-hydroxyethoxy)phenyl]-4-penten-1-one was treated with IPDI to give a
    monoisocyanate product (I). I was used to treat a polybutadiene surface
     under UV irradiation and the surface was then treated with Jeffamine M 2070.
    The treated surface had advancing and retreating contact angles 66 and
     47°, resp., compared to 102 and 78° for the corresponding
     angles for the untreated polymer.
     functionalized coating wetting lens film; contact lens coating wetting
ST
     improvement; macroinitiator aminoacetophenone diisocyanate product
IT
     Coating materials
        (functionalization of coatings with macroinitiators)
ΙT
     Siloxanes and Silicones, preparation
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (aminoalkyl, Petrarch PS 813, reaction products, with aminoacetophenone
        isocyanate derivs.; functionalization of coatings with macroinitiators)
IT
        (contact, functionalization of coatings with macroinitiators)
     Siloxanes and Silicones, preparation
IT
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (di-Me, gluconamidopropyl Me, reaction products with aminoacetophenone
        isocyanate derivs.; functionalization of coatings with macroinitiators)
IT
     Siloxanes and Silicones, preparation
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (di-Me, aminopropyl group-terminated, reaction products, with
        aminoacetophenone isocyanate derivs.; functionalization of coatings
        with macroinitiators)
     Siloxanes and Silicones, preparation
    RL: IMF (Industrial manufacture); PREP (Preparation)
        (hydrogen, reaction products, with aminoacetophenone isocyanate
        derivs.; functionalization of coatings with macroinitiators)
IT
    Monomers
    RL: IMF (Industrial manufacture); PREP (Preparation)
        (macro-, functionalization of coatings with macroinitiators)
IT
     Crosslinking catalysts
     Polymerization catalysts
        (photochem., functionalization of coatings with macroinitiators)
TΤ
    Collagens, preparation
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (reaction products, with aminoacetophenone isocyanate derivs.;
        functionalization of coatings with macroinitiators)
     Siloxanes and Silicones, uses
    RL: DEV (Device component use); IMF (Industrial manufacture); PREP
     (Preparation); USES (Uses)
        (vinyl group-containing, reaction products, with aminoacetophenone
        isocyanate derivs.; functionalization of coatings with macroinitiators)
    9002-98-6DP, Aziridine homopolymer, reaction products with
IT
     aminoacetophenone isocyanate derivs.
    RL: DEV (Device component use); IMF (Industrial manufacture); PREP
     (Preparation); USES (Uses)
        (functionalization of coatings with macroinitiators)
     7585-39-9DP, \beta-Cyclodextrin, reaction products with aminoacetophenone
TΤ
                        9002-89-5DP, Poly(vinyl alcohol), reaction products
     isocyanate derivs.
                                                9003-17-2DP, Polybutadiene,
    with aminoacetophenone isocyanate derivs.
                                                                  9004-54-0DP,
    reaction products with aminoacetophenone isocyanate derivs.
    Dextran, reaction products with aminoacetophenone isocyanate derivs.
     9004-61-9DP, Hyaluronic acid, reaction
    products with aminoacetophenone isocyanate derivs.
                                                          9046-10-0DP,
    Jeffamine D 2000, reaction products with aminoacetophenone isocyanate
              39423-51-3DP, Jeffamine T 403, reaction products with
    aminoacetophenone isocyanate derivs.
                                           65605-36-9DP, Jeffamine ED 2001,
     reaction products with aminoacetophenone isocyanate derivs.
     83713-01-3DP, Jeffamine M 2070, reaction products with aminoacetophenone
     isocyanate derivs. 97917-34-5DP, X-22-161B, reaction products with
     aminoacetophenone isocyanate derivs.
                                           163073-16-3DP, reaction products
```

```
163073-17-4P 163073-19-6P
                                                 180681-41-8DP, reaction
     with polymers
     products with polymers 180681-44-1P 180681-45-2DP, reaction products
     with polymers 180681-46-3DP, reaction products with polymers
     180838-99-7P
                   180839-07-0DP, reaction products with polymers
     180839-09-2P
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (functionalization of coatings with macroinitiators)
     163073-16-3P 180681-41-8P
                                 180681-42-9P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (functionalization of coatings with macroinitiators)
IT
     180681-72-5 180839-10-5
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (functionalization of coatings with macroinitiators)
TT
     119312-38-8
                 180681-43-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (functionalization of coatings with macroinitiators)
                          16938-22-0, 2,2,4-Trimethylhexamethylene
IT
               4098-71-9
     diisocyanate 106797-53-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (starting material; functionalization of coatings with macroinitiators)
TT.
     9004-61-9DP, Hyaluronic acid, reaction
     products with aminoacetophenone isocyanate derivs.
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (functionalization of coatings with macroinitiators)
RN
     9004-61-9 HCAPLUS
    Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT
    106797-53-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (starting material; functionalization of coatings with macroinitiators)
RN
     106797-53-9 HCAPLUS
     1-Propanone, 2-hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methyl- (9CI) (CA
CN
     INDEX NAME)
```

```
L30 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     1995:721436 HCAPLUS
     123:122734
DN
ED
     Entered STN: 05 Aug 1995
TI
     Depigmentation composition for the simultaneous treatment of the
     superficial and deep skin layers
IN
     Ribier, Alain; Simonnet, Jean-Thierry; Fanchon, Chantal;
     Arnaud-Sebillotte, Laurence; Segot, Evelyne
PΑ
     Oreal S. A., Fr.
so
     Eur. Pat. Appl., 12 pp.
     CODEN: EPXXDW
DT
     Patent
T.A
     French
     ICM A61K007-00
IC
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     EP 661038
                         A1
                                19950705
                                            EP 1994-402980
                                                                    19941221 <--
```

```
EP 661038
                                19960724
                          B1
        R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE
                                             FR 1993-15870
                                                                     19931230 <--
     FR 2714601
                         A1
                                19950707
                                19960209
     FR 2714601
                          B1
     AT 140612
                          E
                                19960815
                                             AT 1994-402980
                                                                     19941221 <--
     ES 2092876
                          Т3
                                19961201
                                             ES 1994-402980
                                                                     19941221 <--
     CA 2138875
                          AA
                                19950701
                                             CA 1994-2138875
                                                                    19941222 <--
     JP 07324029
                                19951212
                                             JP 1994-326418
                                                                     19941227 <--
                          A2
                                19950919
                                            BR 1994-5484
                                                                     19941229 <--
     BR 9405484
                                             HU 1994-3828
                                                                     19941229 <--
     HU 71380
                                19951128
                          A2
     CN 1114558
                          Α
                                19960110
                                             CN 1994-120479
                                                                    19941229 <--
     CN 1051919
                          В
                                20000503
     RU 2105540
                                             RU 1994-45127
                                                                     19941229 <--
                                19980227
                          C1
                                                                     19941230 <--
     US 5607692
                          Α
                                19970304
                                            US 1994-366739
PRAI FR 1993-15870
                          Α
                                19931230 <--
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                         _____
                 ICM
                        A61K007-00
EP 661038
                        A61K007/00M4D; A61K008/14; A61K008/34; A61K008/34F;
 EP 661038
                 ECLA
                        A61K008/365; A61K008/368; A61K008/37; A61K008/42;
                        A61K008/44; A61K008/49C4; A61K008/49H; A61K008/60; A61K008/67C; A61K008/67H; A61K008/73F; A61K008/73L;
                        A61K008/97; A61K008/98F; A61Q019/02
                        A61K007/00M4D; A61K008/14; A61K008/34; A61K008/34F;
 FR 2714601
                 ECLA
                        A61K008/365; A61K008/368; A61K008/37; A61K008/42;
                        A61K008/44; A61K008/49C4; A61K008/49H; A61K008/60;
                        A61K008/67C; A61K008/67H; A61K008/73F; A61K008/73L;
                        A61K008/97; A61K008/98F; A61Q019/02
                        424/450.000; 424/062.000; 424/401.000; 514/844.000
US 5607692
                 NCL
                 ECLA
                        A61K007/00M4D; A61K008/14; A61K008/34; A61K008/34F;
                        A61K008/365; A61K008/368; A61K008/37; A61K008/42;
                        A61K008/44; A61K008/49C4; A61K008/49H; A61K008/60; A61K008/67C; A61K008/67H; A61K008/73F; A61K008/73L;
                        A61K008/97; A61K008/98F; A61Q019/02
     Depigmentation compns. comprising dispersion of lipid vesicles for the
AB
     simultaneous penetration into the superficial and the deep skin layers are
     claimed. Double liposome creams contained 31.3 g of vesicles for the deep
     layer (epidermis) comprising triglyceryl cetyl ether 7.6, cholesterol 7.6,
     sodium acylglutamate 0.8, kojic acid 2.0, glycerol 12.0, preservatives
     0.1, and water q.s. 100 g; 25.0 g of vesicles for superficial layer
     (stratum corneum) comprising Chimexan NS:dimyristylphosphate (95:5) 20.00,
     N-octanoy1-5-salicylic acid 2.0, glycerol 15.0, preservatives 0.2, and
     water q.s. 100 g; and vegetable oils 4.5, preservatives 0.3, carboxyvinyl
     polymer 0.9, NaOH 1.8, and water q.s. 100%.
     cosmetic dispersion lipid vesicle skin layer; depigmentation cosmetic
ST
     dispersion liposome cream
     Pigments
TΤ
        (depigmentation composition for simultaneous treatment of superficial and
        deep skin layers)
     Fatty acids, biological studies
IT
     Glycerides, biological studies
     Inflammation inhibitors
     Lipids, biological studies
     Phospholipids, biological studies
     Sunscreens
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (depigmentation composition for simultaneous treatment of superficial and
        deep skin layers)
IT
     Keratosis
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (inhibitors; depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
IT
     Cosmetics
```

· ..

```
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (antiaging, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
TT
     Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (carboxy, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
TT
     Skin, disease
        (depigmentation, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
     Glycerides, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (di-, depigmentation composition for simultaneous treatment of superficial
        and deep skin layers)
TΤ
     Lecithins
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (egg yolk, hydrogenated, depigmentation composition for simultaneous
        treatment of superficial and deep skin layers)
IT
     Skin
        (epidermis, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
     Phospholipids, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hydrogenated, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
TT
     Carboxylic acids, biological studies
     RL: BUU (Biological use; unclassified); BIOL (Biological study); USES
     (Uses)
        (hydroxy, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
IT
     Steroids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hydroxy, ethoxylated, depigmentation composition for simultaneous treatment
        of superficial and deep skin layers)
     Amino acids, biological studies
TΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (lipo, depigmentation composition for simultaneous treatment of superficial
        and deep skin layers)
IT
     Cosmetics
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (liposomes, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
TT
     Cosmetics
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (moisturizers, depigmentation composition for simultaneous treatment of
        superficial and deep skin layers)
IT
     Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyhydric, alkyl ethers; depigmentation composition for simultaneous
        treatment of superficial and deep skin layers)
     Lecithins
TT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (soya, depigmentation composition for simultaneous treatment of superficial
        and deep skin layers)
IT
     Skin
```

(stratum corneum, depigmentation composition for simultaneous treatment of superficial and deep skin layers) TΤ Lecithins RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (sunflower-oil, depigmentation composition for simultaneous treatment of superficial and deep skin layers) IT 16177-21-2, Sodium glutamate RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (acyl; depigmentation composition for simultaneous treatment of superficial and deep skin layers) 50-99-7, Glucose, TТ 50-81-7, L-Ascorbic acid, biological studies biological studies 57-13-6, Urea, biological studies 57-88-5, Cholesterol, biological studies 69-72-7, biological studies 108-46-3, 1,3-Benzenediol, biological studies 123-31-9, 1,4-Benzenediol, biological studies 302-79-4, Retinoic acid 331-39-5 501-30-4, Kojic 2197-63-9, Dicetylphosphate 6640-03-5, Dimyristyl phosphate 9004-61-9, Hyaluronic acid 9004-99-3, Polyethylene glycol stearate 9005-25-8, Starch, biological studies 25168-73-4, Saccharose stearate 25618-55-7D, Polyglycerol, C16-18-glycol derivs., lauryl ethers 26266-57-9, Sorbitan palmitate 27195-16-0, Saccharose distearate 51827-83-9 56090-54-1D, Triglycerol, hexadecyl ethers 63119-59-5, Diglycerol distearate 74563-64-7, Phytanetriol 78418-01-6, Octanoyl-5-salicylic acid 99734-29-9, Tetraglyceryl tristearate 119831-19-5 128895-87-4, Triglycerol monohexadecyl ether 143747-72-2, Triglycerol, diether with 1-hexadecanol 166050-05-1 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (depigmentation composition for simultaneous treatment of superficial and deep skin layers) 9002-10-2, Tyrosinase IT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (inhibitors; depigmentation composition for simultaneous treatment of superficial and deep skin layers) 9004-61-9, Hyaluronic acid 78418-01-6 , Octanoyl-5-salicylic acid RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (depigmentation composition for simultaneous treatment of superficial and deep skin layers) RN 9004-61-9 HCAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 78418-01-6 HCAPLUS

CN Benzoic acid, 2-hydroxy-5-(1-oxooctyl)- (9CI) (CA INDEX NAME)

Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

HO
$$C-(CH_2)_6-Me$$

=> b home FILE 'HOME' ENTERED AT 14:10:10 ON 27 AUG 2005

CN